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JAPANESE COASTAL DEFENCE

March 1944

GENERAL HEADQUARTERS, INDIA

MILITARY INTELLIGENCE DIRECTORATE

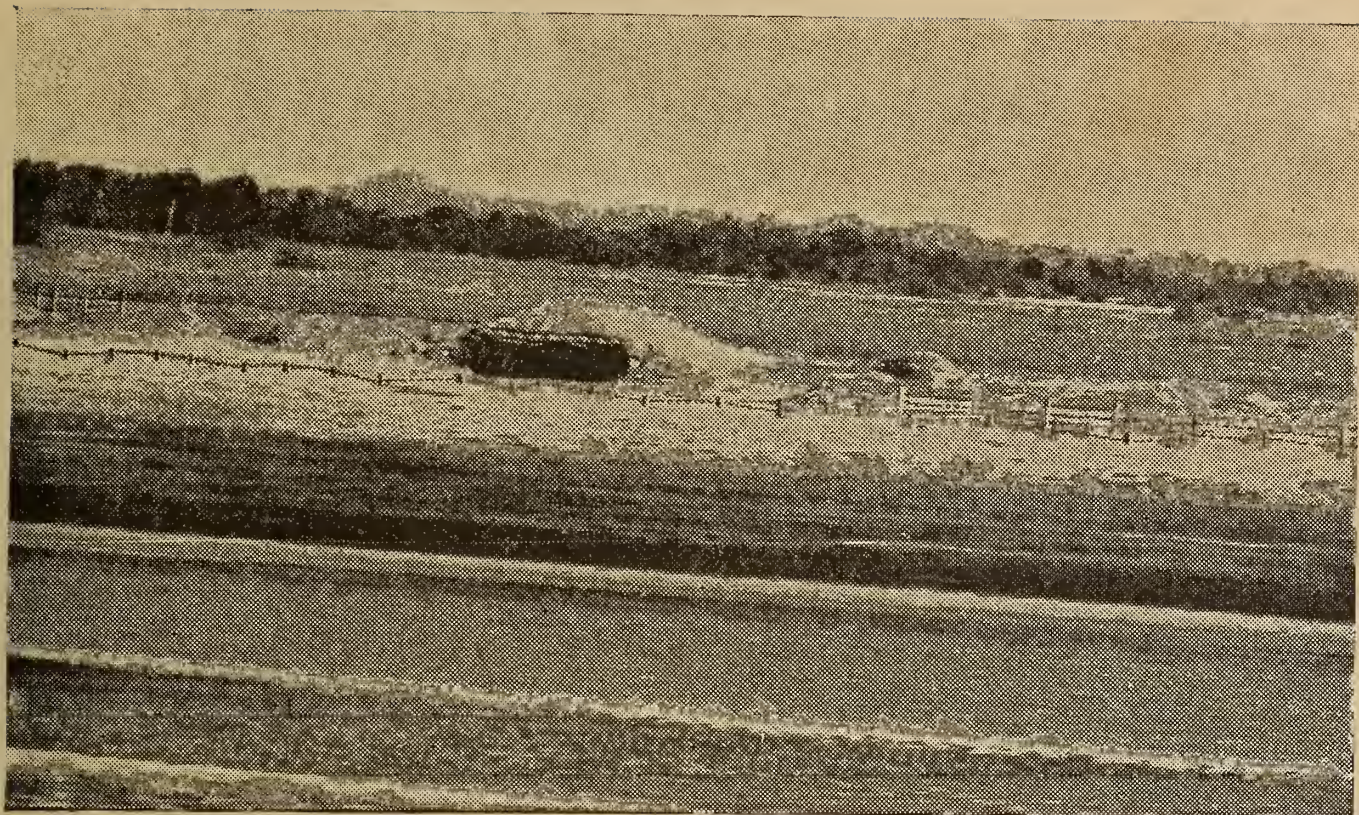
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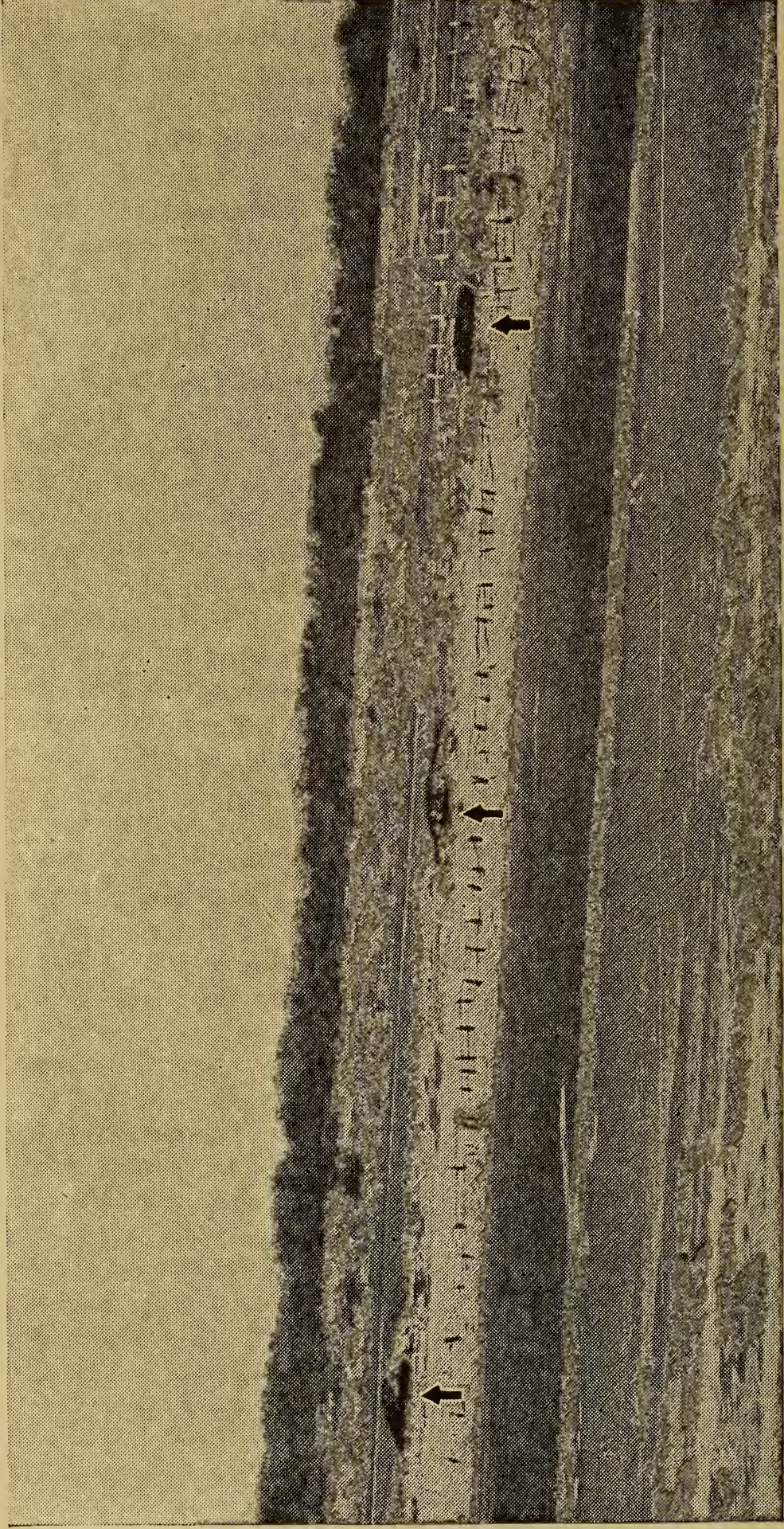
FRONTISPIECE.



A Japanese coast defence position with a prominent strongpoint set near the beach wire obstacle. The forward siting of the whole position in close proximity to the high water line is a noteworthy feature.



A double-bay strongpoint set back in a coastal defence position, with a group of Japanese soldiers standing beside it.



Three single-bay strongpoints, with ground level firing slits, can be seen in this coastal defence position. Their unobtrusive appearance and the way they blend into their surroundings should be noticed. Another feature is the wire obstacle stretching the length of the front of the position along the beach, and which can also be seen on the right circling it to the flank and rear.

CONTENTS.

	<i>Pages.</i>
<i>Frontispiece</i>	1—2
<i>Introduction</i>	4
 <i>Chapters.</i>	
I. Orders for Coast Defence	5—7
II. Plans for Coast Defence	8—13
III. Phases in the Construction of a Position	14—23
IV. Special Positions	24—28
V. Obstacles and Strongpoints	29—34
VI. An Example of Some Japanese Coast Defences in Burma	34—37
VII. Japanese Coast Defence Tactics	38—39

Note.—In this book the word “strongpoint” has been used to signify a single post generally built of earth and timber.

INTRODUCTION.

This pamphlet is an attempt to give a picture of Japanese coastal defence methods. The material has chiefly been taken from battle experience in the North Pacific Area, from documents captured during fighting in the South West Pacific Area and from aerial photographs taken in the South East Asia Command. It is as yet quite impossible to give a complete account of this subject, as it is only comparatively recently that it has been possible to draw on actual battle experience, while the Japanese themselves have only lately had to turn their main attention from the problems of attack to those of defence and their technique is not therefore as yet fully developed. However, it is considered that the general methods and defensive lay-outs described and illustrated on the following pages, though not by any means giving the whole story, will nevertheless be of value in estimating what form coastal defence may take in the future.

This book opens with the orders given by a Japanese commander who was preparing an island in the South West Pacific for defence against an expected Allied attack. In subsequent chapters an attempt is made to illustrate the main points of his orders by various sketches and diagrams. Information is also given on other aspects of Japanese coast defence, so far as this is available. In the last chapter there is some general discussion on the Japanese tactical views on how a coast line should be defended. This discussion is NOT in any way intended to come to any firm conclusions but it is based on what evidence is so far available at these Headquarters.

CHAPTER I.—ORDERS FOR COAST DEFENCE.

Introduction.

Given below is a translation of a Japanese commander's orders for the organization of his forces for the defence of an island in the South West Pacific against an anticipated Allied attack. The forces he had under his command apparently included approximately two infantry battalions, a special naval landing party (strength unknown), an independent mountain artillery troop, an A.A. battery, two machine-cannon troops, a searchlight troop and a field hospital.

The Defence Plan.

Strictly Military Secret.

ISLAND DEFENCE PLAN OUTLINE.

- (1) *Estimate of the Enemy Situation.*—In order to demonstrate their superior Air and Naval power, the enemy will most likely make an attempt to land during the day time. However, it is possible that the enemy may attempt a surprise night attack and land a part of his force just before first light. In addition, because of the numerous natural obstacles, such as coral reefs and thick jungles, the landing points chosen are likely to be in the area from the vicinity of the Airfield to Jack Harbour.
- (2) *Defence Policy.*—The island defence forces cannot expect reinforcements. Avoid the scattering of forces and hold the area until death. Strike heavy blows on the superior enemy when he attacks, so that his plans will be frustrated.
- (3) *Disposition of Troops.*—In accordance with the foregoing paragraph, positions will be selected so that we will not invite hastily a decisive battle, nor expend our strength too soon. Only a proportion of the troops will, therefore, be placed near the shoreline to inflict damage upon the enemy during the landing operations, the main line of defence will be placed in the coconut groves so that it will be comparatively difficult for the enemy to use their superior fire power, especially rifle and artillery fire, and this will lessen the effectiveness of aerial bombardment and make it difficult for tanks to operate. Each company and platoon will organize independent positions as strong as possible, and will annihilate the enemy at close range.

Owing to the fact that the left sector of the position is backed by thick jungle, utmost attempts will be made to hold firm in the present positions. If this becomes impossible, attempt to decoy the enemy into the jungle by simulating defence there, while actually retiring to the area of position "X" (to be indicated separately). New positions will be organized there and defended to the last.

The unit defending Jack Harbour will first disrupt the enemy's landing attempts from its present position on the shoreline. It will then also simulate defence in the jungle area in order to cover its withdrawal to position "X" (to be indicated separately). The unit will maintain contact with the left sector and will organize new positions with the intention of defending them to the last. Positions will be prepared with multiple defences, so that stout resistance can be maintained even though the general battle situation becomes unfavourable. (See Chapter IV.)

- (4) *Outline of the Plan for the Construction of Positions.*—Since the present positions are chiefly designed for the purpose of battle on the shoreline, they will be strongly organized in depth as quickly as possible. Owing to the fact that the enemy may attack while these positions are still being constructed, and so that we may be sure of achieving a stubborn and persistent defence, the construction of positions will be carried out in phases as follows:—

First Phase (Twelve days).

(a) *Infantry Units.*

- (i) *Fire Positions.*—Leave the present forward positions as they are now. Construct main positions for the heavy weapons and front line platoons.

They will have light cover only. If the enemy should attack during this period, these positions will be used by company or battalion reserves. (*See Chapter III.*)

- (ii) *Living Quarters*.—Based on the foregoing paragraph, construct quarters and air raid shelters mainly to accommodate units of squad size, and provide for water supply.
- (iii) *Ammunition and Rations*.—The front line units will make plans for the siting and dispersion of ammunition and ration dumps within the main position. As far as possible, cover will be constructed for them.
- (iv) *Establishment of Defence Unit H. Q.*—Construct quarters and air raid shelters for part of Headquarters, the Colour Bearer Platoon, the Signals Unit and the Labour Platoon. These will be sited in the Jungle North of the airfield. Further ammunition and ration dumps will be dispersed in the same area.
- (v) *Communications*.—Make a small foot-path between the airfield and Jack Harbour.

(b) *Units other than Infantry.*

In addition to endeavouring to supply ammunition and rations, units will assist in strengthening the present positions. The Left Sector units will strengthen the positions for final defence near "X".

Second Phase (Fifteen Days).

(a) *Infantry Units.*

- (i) The front line units will build obstacles and construct strategic firing points and heavy weapon strongpoints within the main position. (*See Chapter III.*)
- (ii) Roughly construct living facilities for the front line units within the main position.
- (iii) Strengthen Defence Unit Headquarters.
- (iv) Roughly construct living quarters for the reserves in the area North of the Airfield.
- (v) Construct a hospital in the jungle area.

(b) *Units other than Infantry.*

Living quarters will be constructed and the work of the first phase will be continued and all positions strengthened.

Third Phase (Ten Days).

- (i) Each unit will complete its positions and living facilities and carry out additional fortification. (*See Chapter III.*)
- (ii) Construct dummy positions.
- (iii) Construct multiple defence positions. (*See Chapter IV.*)
- (iv) Improve communication facilities within the positions.
- (v) Complete all arrangements concerning the supply of rations and ammunition.
- (vi) Establish the hospital.

Material to be used in the Construction Work.—As far as possible, utilise the materials locally available. It is planned to deliver additional material as soon as it arrives.

After the third phase, endeavour to increase the strength of the positions.

- (5) *Plan of Action in Battle*.—Do not waste your strength unnecessarily against a superior enemy, but overcome all hardships and always keep up the will to fight, thus continuing stubborn resistance. Lead your men so as to deliver the heaviest blows at the enemy.

(a) *Battle on the Shoreline.*

- (i) Units in the right sector will oppose any enemy landing in daylight mainly by fire from artillery and heavy weapons. A landing at night or just before first light will be opposed by weapon fire and also by counter attack. Harass and strike the enemy and thereby attempt to disorganize his plans.

- (ii) Although it is difficult, the left sector units will attempt to organize positions in depth. Utilise the obstacles on the beach in an attempt to annihilate the enemy on the beaches by an attack with the main, or even the whole force. (*See Chapter V.*)
- (iii) Units in the Jack Harbour area will follow the same plan as those in the right sector.

(b) Battle after the Enemy Landing.

- (i) Units in the right sector will endeavour to organize their fire power at close range. They will engage actively in the battle and will defend the main position until death.
- (ii) The left sector units will take advantage of the jungle to simulate defence and to continue to strike at the enemy, while actually retiring to the positions which have already been constructed at "X". These positions will be defended to the last.
- (iii) The units defending Jack Harbour will retire according to the same principles as the left sector units to the vicinity of "X" and they will defend the positions there until the end.
- (iv) The Mountain Artillery units positioned on the beaches will fire at the enemy boats and tanks while they are making their landing. Subsequently, the main body will co-operate with the right sector units.
- (v) The principal duty of the AA units will be defence against air attack, but if enemy tanks penetrate the positions they will endeavour to annihilate them. [*See Chapter II. Section 3 (c).*]
- (vi) When our aircraft co-operate with our ground troops, they will be requested to bomb the rear of the enemy's front lines and especially his artillery positions.
- (vii) During the entire period, small groups of Infantry will infiltrate through the enemy lines at night and will harass his rear.

COMMENT.—One of the most striking features in this operation order is the constantly reiterated exhortation to the morale of the defending force. This starts in the second paragraph defining their defence policy, which might be summarised as the maintenance of an offensive defence until death; it continues throughout the body of the order with constant allusions to attack where possible and to "defence until the last", and finally the very last paragraph stresses offensive action in the form of infiltrating patrols. The whole order, in fact, is illustrative of the conception, so fundamental in Japanese tactics, of an offensive and active defence to be maintained to the last man and the last round.

As far as possible the other main points of interest are as already indicated by cross-references, dealt with in later chapters; there remain, however, certain noteworthy features. One is the allusion to reserves. So far as can be seen from another document referring to the distribution of forces, the central reserve was an extremely small one, consisting of two platoons of infantry and a platoon (2 MGs) from a battalion MG company. It would appear as though their main role was the protection of Defence Headquarters. However, it is clear from sub-paragraph (i) of the instructions for the first phase defence construction, that local battalion and company reserves were also maintained. The proportion of these to the main body is not known.

Two other points of artillery interest are, firstly, the use of Mountain Artillery to fire against landing craft and tanks. Mountain Artillery units are known to carry AP shot, but in other respects their equipment would not seem to be particularly well designed for this role. The second feature is the detailing of anti-tank defence as a definite, even though secondary, task for AA units. Both heavy and light-AA equipments are designed to be able to fulfil a dual-purpose role and they are often sited with this object in view. For instance, in their defence of Attu Island in the North Pacific the Japanese assigned their AA units a variety of roles which, in addition to their primary task of defence against air attack, included fire against naval and shipping targets and against personnel. In all these roles they operated effectively and consequently the versatile employment of AA in the future is to be expected.

CHAPTER II.—PLANS FOR COAST DEFENCE.

Section 1—Introduction.

This chapter gives details of the Japanese defence plans for a promontory in the S. E. Asia Command, for a beachline also in the S. E. Asia Command, and for the Eastern portion of Attu Island in the North Pacific.

These three plans are in themselves an interesting commentary on Japanese defence methods. There is an evident similarity between the plans for the defence of a promontory (Section 2) and the island defence plan (Section 3), both of which are in clear contrast to the beach defence lay-out (Section 4). The reason for this difference almost certainly lies in the nature of the ground; in the first two cases high ground, offering commanding positions, closely borders the beaches, while in the last case this is not so. The Japanese reaction to this has, in general, been in the first two instances to site the majority of their defences on high ground leaving the beaches themselves relatively undefended, while in the latter case their positions have been sited as close as possible to the water's edge.

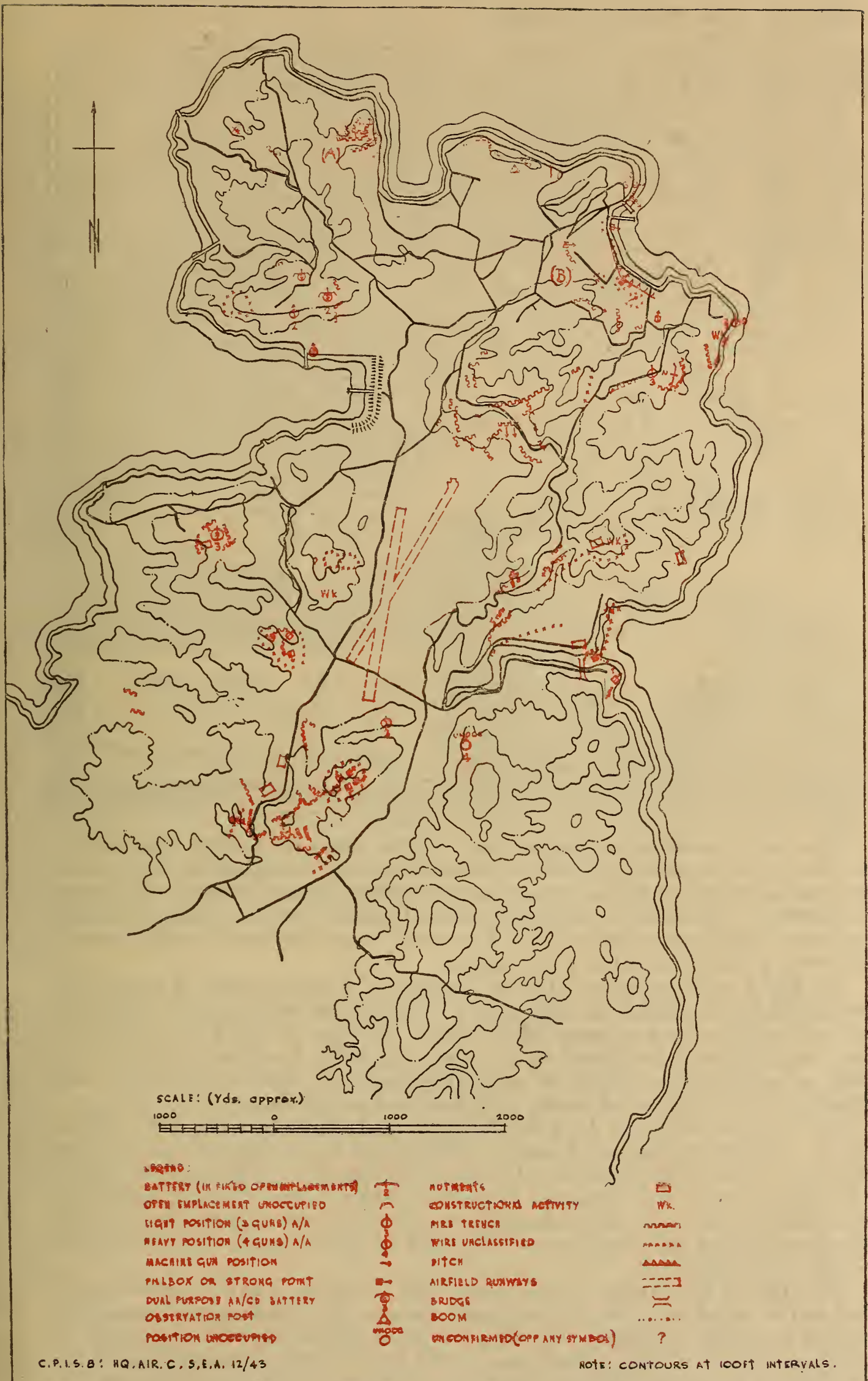
Such a policy is in line with normal Japanese tactical concepts, for they have always shown a particular predilection for the occupation of high ground and, as a corollary, they seem relatively susceptible to any attack launched from higher ground than that of their own positions. On the other hand, a fundamental principle of Japanese tactics is the notion of the close assault, which they regard as the perfect expression of the offensive spirit. These two principles, in conjunction with the determining factor of ground, probably decide the nature of their coast defence lay-out. Thus, when the ground allows it, as in the cases illustrated in Sections 2 and 3, their positions are sited on high ground set back from the beaches and reliance is placed upon fire-power from well constructed and well concealed positions to repel and attack. On the other hand, if the ground does not lend itself to this type of defence, then their positions are sited close to the water line, which will enable them to oppose a landing by the typically Japanese method of close combat at the earliest possible time and at the moment when the landing troops will be the most open to a direct assault. The instruction to "annihilate the enemy at the water's edge" is a constantly reiterated exhortation in all orders addressed to troops manning a coast defence position of this latter type. These points are given further emphasis and illustration in the subsequent sections.

Section 2.—The Defence of a Promontory.

The Japanese positions shown in the sketch have been located by aerial photography alone, therefore it cannot be assumed that the picture given is complete in all respects. However, sufficient information seems to be available to make clear the general pattern of defence, namely the concentration of their positions on the high ground so as to provide both for coast defence, by means of fire power directed from well constructed positions on dominant ground, and also to provide direct defence for the two landing strips. The exception to this principle is the siting of defence positions [position (B)] close to the water line in the bay on the North-east of the promontory which can, however, be explained by the relatively low lying ground inland in this area, thereby necessitating the more forward placing of positions.

It can be expected that many, if not all, the A.A. guns shown have been sited with a view to their use in a dual-purpose role, and this would apply to both heavy and light positions. The success they are likely to achieve in this is illustrated in Section 3.

There seems to be an evident similarity in the general defence lay-out between this example and that of Attu Island, except in the important point of camouflage. That little effort at concealment has been made in the present instance is clear from the amount that aerial photography has been able to reveal, whereas on Attu Island close attention was paid to camouflage and a good degree of concealment was achieved.



Section 3.—Attu Island Defence Plan.



The sketch above shows that portion of Attu Island over which fighting took place during its re-capture by United States Forces in the spring of 1943, and it also gives some idea of the mountainous nature of the terrain, which in places rises up to 2,000 ft. The best commentary on the Japanese system of defence on Attu is provided by the report of the U. S. Forces who were in action there, from which the following information has been adapted.

(a) *Siting of Positions and Use of Ground.*—The general plan of defence for Attu Island was to defend the high ground to the rear of each bay area. Positions were so sited that they commanded the flanks and rear of any forces advancing inland, and they were positioned so as to be inaccessible to attack, so as to be as secure as possible from naval or aerial bombardment, and so that they were difficult both to observe and to fire upon from the valleys below.

In fact, once again on Attu the Japanese made full use of the most difficult terrain. Precipitous and rocky canyon walls proved no deterrent to enemy selection of positions, if they provided wide fields of flanking fire. Machine guns, mortars and even field pieces were emplaced in positions which it was extremely difficult for even a rifleman to reach, which demonstrated the Japanese eagerness to use high-ground positions of extreme inaccessibility which might be considered as insuperable or impractical for attack.

Throughout, the Japanese also exploited the terrain so as to give the maximum effect to the fire of each rifle and automatic weapon. It was discovered that either trenches or tunnels frequently connected fox holes, rifle firing bays and automatic weapon positions, so that a single man might avail himself of several fields of fire from different positions. This practice of moving from one firing point to another made it most difficult to determine exactly the position or strength of the defenders.

The net result of the Japanese use of ground was that the attacking U. S. Forces were often pinned down by fire coming from highground positions, the sources of which were unseen and which could only be located or silenced with extreme difficulty.

(b) *Use of Obstacles.*—The enemy made very little use of artificial obstacles. No barbed wire entanglements were found, nor were there any anti-tank ditches or obstacles. Stocks of land mines and magnetic mines were found, but only the former were employed and then to a very limited extent. One instance of the use of mines was in the East arm of Holtz Bay where a few Type '93' mines were laid on the beach in two rows. The only other known case of their employment was in the mining of the mountain pass leading from Sarana Bay towards Chichagof Harbour, and in this instance their use was extremely amateurish, for they were laid in geometrical pattern, while the outline of the holes was clear. They were quickly removed without injury to anyone.

The reason for the enemy's failure to use artificial obstacles was probably the belief that the nature of the terrain was in itself obstacle enough. He built no roads and no bridges which could be used by armoured or motor vehicles and therefore presumably calculated that he would need no defence against them.

(c) *Versatile Employment of Artillery.*—Very little ground artillery was used by the Japanese, but this was to some extent compensated for by the multi-purpose role played by their AA Artillery, which was not only well sited to provide anti-aircraft protection but also to be used against naval or shipping targets in addition to ground troops. For instance, the 75 mm. guns sited in the Chichagof Bay and Holtz Bay areas were capable of concentrating heavy fire on any landing barges while they were definitely employed in an anti-personnel role, their favourite target being troops crossing ridge lines.

(d) *Conclusion.*—The Japanese defence plan for Attu Island seems to have been entirely based on the assumption that they had infallibly predetermined the direction of any Allied attack, namely a landing in the main bays and subsequent advance up the valley beds.

The guns and positions covering the main Northern Bays were so sited and concentrated that no landing boat could be expected to reach shore while one gun still remained to fire. All positions were given the maximum protection and the guns were secure against everything except a direct hit. In addition, just to meet the possibility that American Naval fire and air bombardment might knock out the dual purpose guns, and in case a beach landing was actually possible, the enemy had prepared almost innumerable positions flanking the Holtz Bay beaches and facing inward and even to the rear. Behind the most inviting landing beaches, the Japs had apparently prepared four successive lines of resistance, with a final defensive line at the valley head. The setting for their plan was completed by the defence layout in Massacre Valley, where the lower positions flanking the valley were hidden by perfect camouflage while those higher up were shrouded by the prevailing mist and clouds.

On the evidence given by the siting of these positions, it is reasonable to assume that the Japanese appreciation of the course of the battle for Attu was either that a direct frontal assault would be made on the Holtz Bay beaches, or that a back-door approach would be attempted via Sarana or Massacre Bays, probably the latter as the exit from Sarana is blocked by lake Nicholas. Their plan for Holtz Bay was chiefly designed to annihilate the attacking forces on the water or on the beaches and then to exterminate the few that might penetrate into the valleys by concentrated enfilade fire. On the other hand, the apparent intentions for Massacre Bay was to meet attack by more subtle means. Owing to good camouflage and cloud cover, few positions in that area were likely to be located by previous reconnaissance and the few visible tents, trails and foxholes would suggest that the valley was only thinly out-posted. The few scattered soldiers who fled the beach at the approach of the attacking force may well have been a planned decoy to start an advance up the bed of Massacre Valley. Against that march the enemy probably only intended to use enough frontal resistance to ensure the building up of a powerful force. When that force should have been pocketed solidly in the valley, all the flanking machine-guns and mortars would open fire, grenade discharger and rifle fire would plunge down from above and finally the artillery at the head of the valley would complete

the process of annihilation. The Allied Forces would be pinned to the ground and destroyed in detail by much inferior forces having the two decisive advantages of being completely hidden and enjoying absolute command of terrain.

The plan of defence for Attu failed, as do so many Japanese plans, in making no provision for the unexpected. The direction of the attack of the Northern Force (shown on the map) took them by surprise and outflanked their carefully prepared Holtz Bay positions which had not got adequate all round defence. The direction of attack of the Southern Force from Massacre Bay had been correctly anticipated, but not the nature of its execution which involved the quick movement to high ground outflanking and dominating the Jap positions. The defence plan met some slight success initially where Allied troops failed promptly to initiate fire and movement tactics or did not succeed in outflanking or getting above the Jap centres of resistance. The plan was frustrated completely where Allied troops did the unexpected, where they took the initiative by fire and movement tactics and where they promptly seized dominating terrain features. It was, in fact, the failure to provide against surprise, either in the direction or nature of the Allied attack, which cost the Japanese Attu Island.

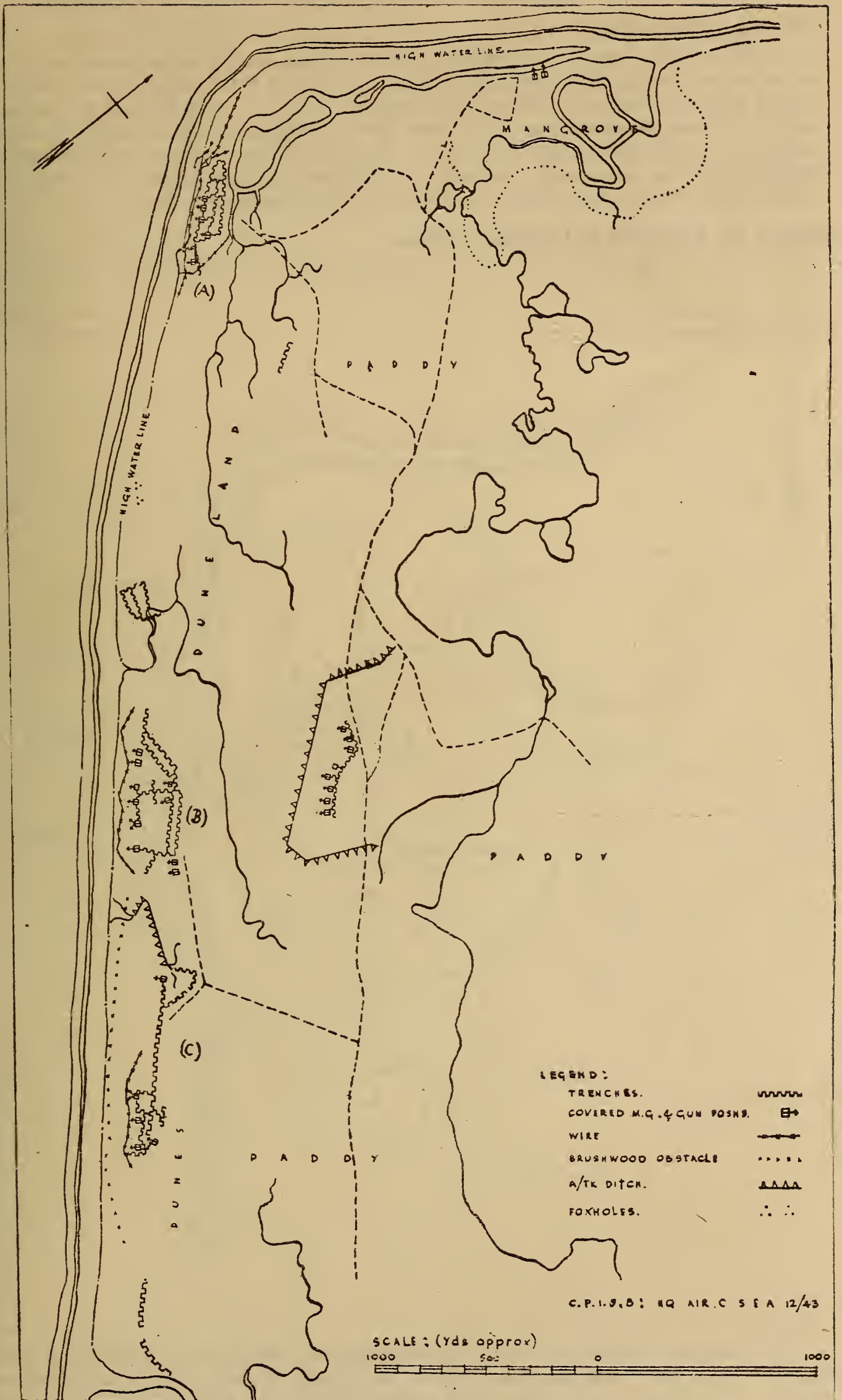
Section 4.—The Defence of a Beach-Line.

The system of siting defence positions as shown in this sketch (taken from air photographs) of a coastal area in Burma is in evident contrast to that detailed in Sections 2 and 3. In this case, obvious emphasis has been laid upon siting defences as far forward as possible, indeed the frontal wire obstacles have in places been laid actually below the high water line, and the proximity of all the positions to this line is a very noticeable feature.

Another interesting point of comparison between this lay-out and that of Attu Island is the extensive use made of wire obstacles and anti-tank ditches. In view of this, it is not unreasonable to presume that anti-tank mines have also been much more freely employed, probably both on the beaches and to cover the likely lines of A. F. V. movement within the area.

The relatively large number of strongpoints included within each defensive position should be noticed. The majority of these are probably designed as fire positions for MMGs. and LMGs., but some of the larger emplacements are designed to take heavier weapons and in particular the 37 mm. A. Tk. gun. This is a versatile weapon which has been freely used by the Japanese to fire against both landing craft and personnel, as well as in its original role.

The siting of the central position, set back so as to enable it to cover by fire the rear of the forward positions, is of interest. It is presumably in this position that the local reserves would be held, being conveniently centrally placed.

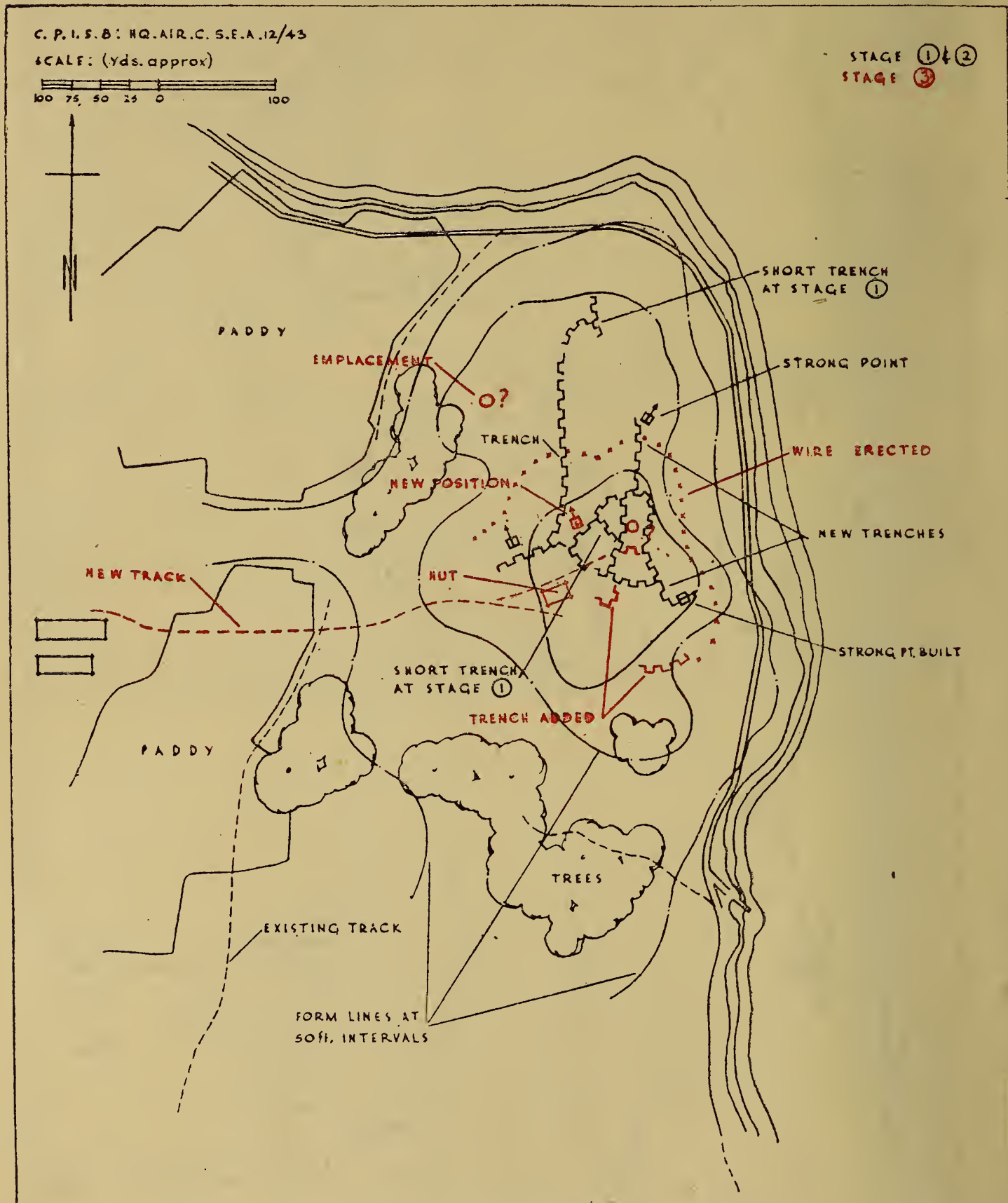


CHAPTER III.—PHASES IN THE CONSTRUCTION OF A POSITION.

Section 1.—Introduction.

The construction of a defensive position is essentially a progressive process during which its strength is gradually built up. The following sections in this chapter give various examples of some typical Japanese coast defence positions in the S. E. Asia Command and illustrate their development as revealed by aerial photography. They should be compared with the different phases of construction which were laid down in the orders given in Chapter I. Throughout this chapter the early constructional stages are shown in black, and the later in red.

Section 2.—Examples of Defence Positions.



The diagram illustrates the various stages in the construction of a defence position sited on a spur of high ground giving good fields of fire over the neighbouring beaches. The locality is actually that shown at position (A) overlooking from the

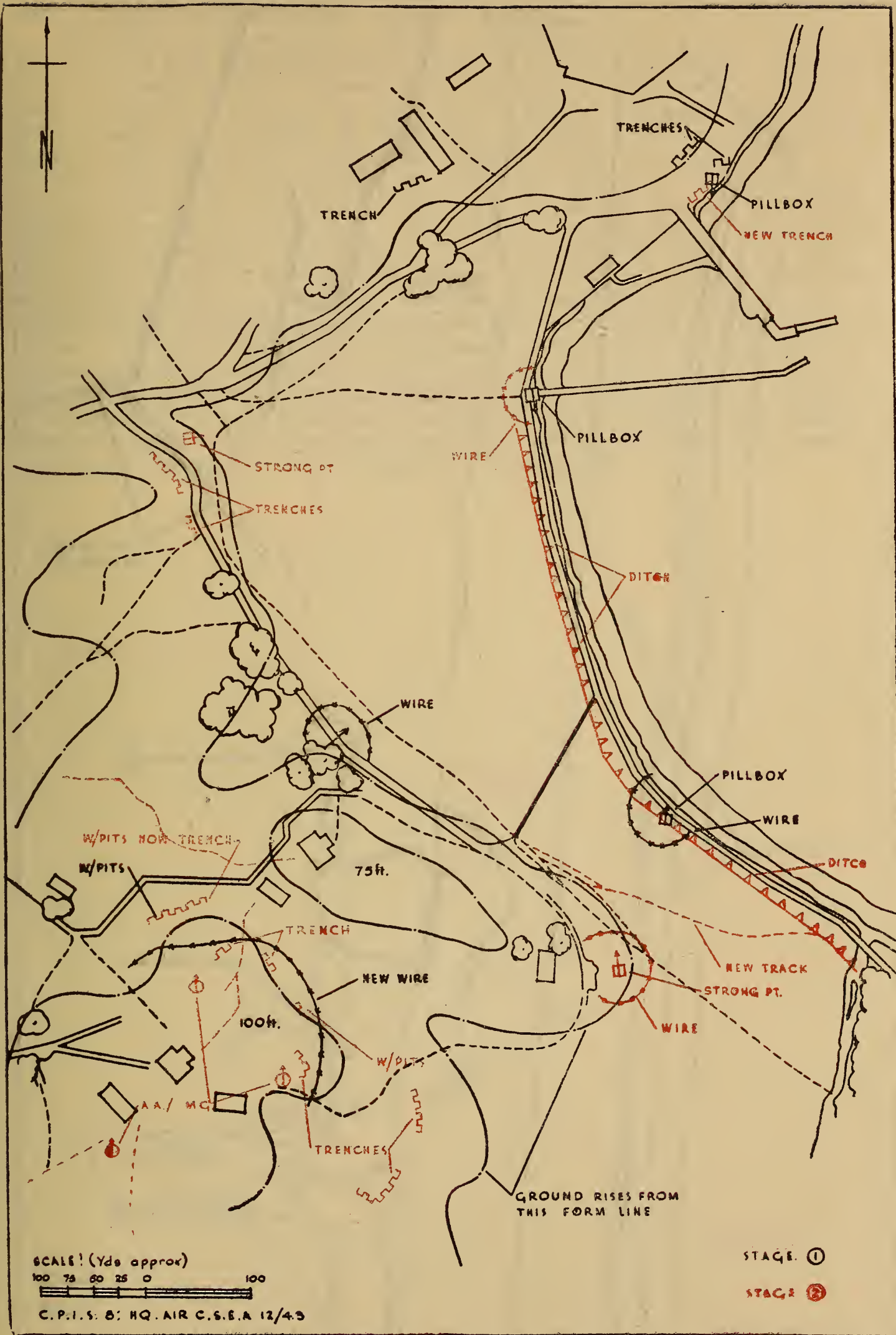
East the main bay at the North end of the promontory described under Section 2 of Chapter II.

The earliest constructional activity consisted only of ground clearance, the marking out of the trench system and a little preliminary digging. A month later the position was already fairly well advanced, for by then the trench system, up to a length of some 700 yds. had been completed, and three strongpoints had been incorporated into the general lay-out. The developments in the position which were seen to have taken place several months later are shown as Stage 3. As can be seen, its defences have been improved by additional trench digging, while a fourth strongpoint has been added and wire defences have also been erected. In addition, the communications have been improved by the making of a new track into the position. In its final form, the locality can be deemed to be of good intrinsic strength and well sited and designed to cover the beaches to the North and East.

The sketch shows the development of the positions defending the main bay on the West of the promontory [position (B)] described under Chapter II, Section 2. In its early stages the only really significant forward defences were the pillboxes covering the length of the sea-front. Further back a start had been made with the construction of defences on the rising ground.

At stage 2, the position has taken its proper shape. It can be seen that the locality is sited in two 'lines', the first covering the sea-wall and its immediate sea approaches, while the second is set some way back on rising ground having a good field of fire over the flat ground intervening between it and the sea-wall.

Another interesting feature which has appeared at this stage is the extensive ditch, presumably designed as an anti-tank obstacle, which has been dug behind the sea-wall. This ditch is 15-20 feet wide and some 600 yards long. It should also be noticed that the most Southerly defences, which first appeared only as a ring of wire with a few isolated weapon-pits, have developed into an extensive AAMG position, with ground defences incorporated. This position is almost certainly sited to fulfil a dual-purpose role.



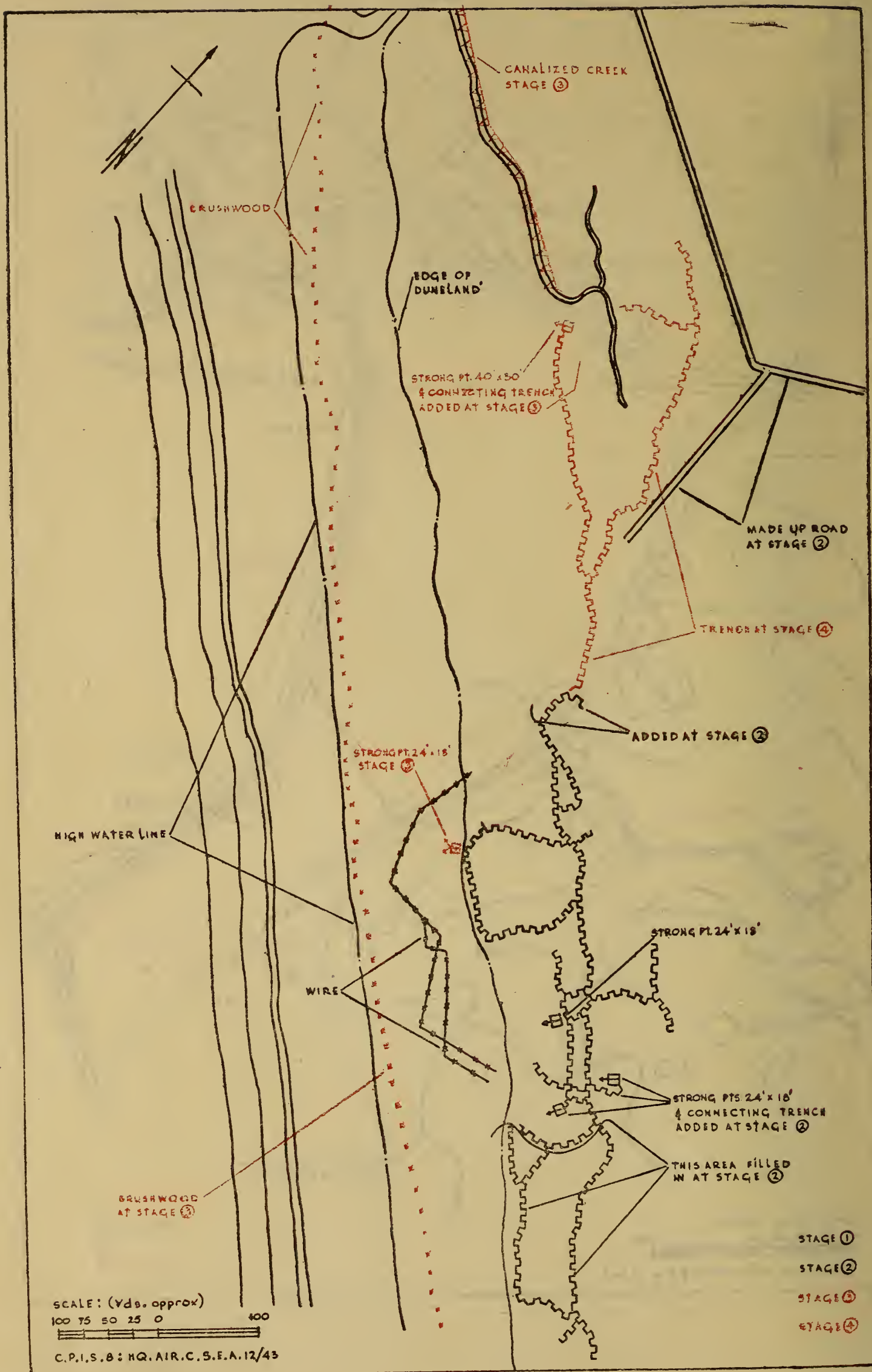
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STAGE 1

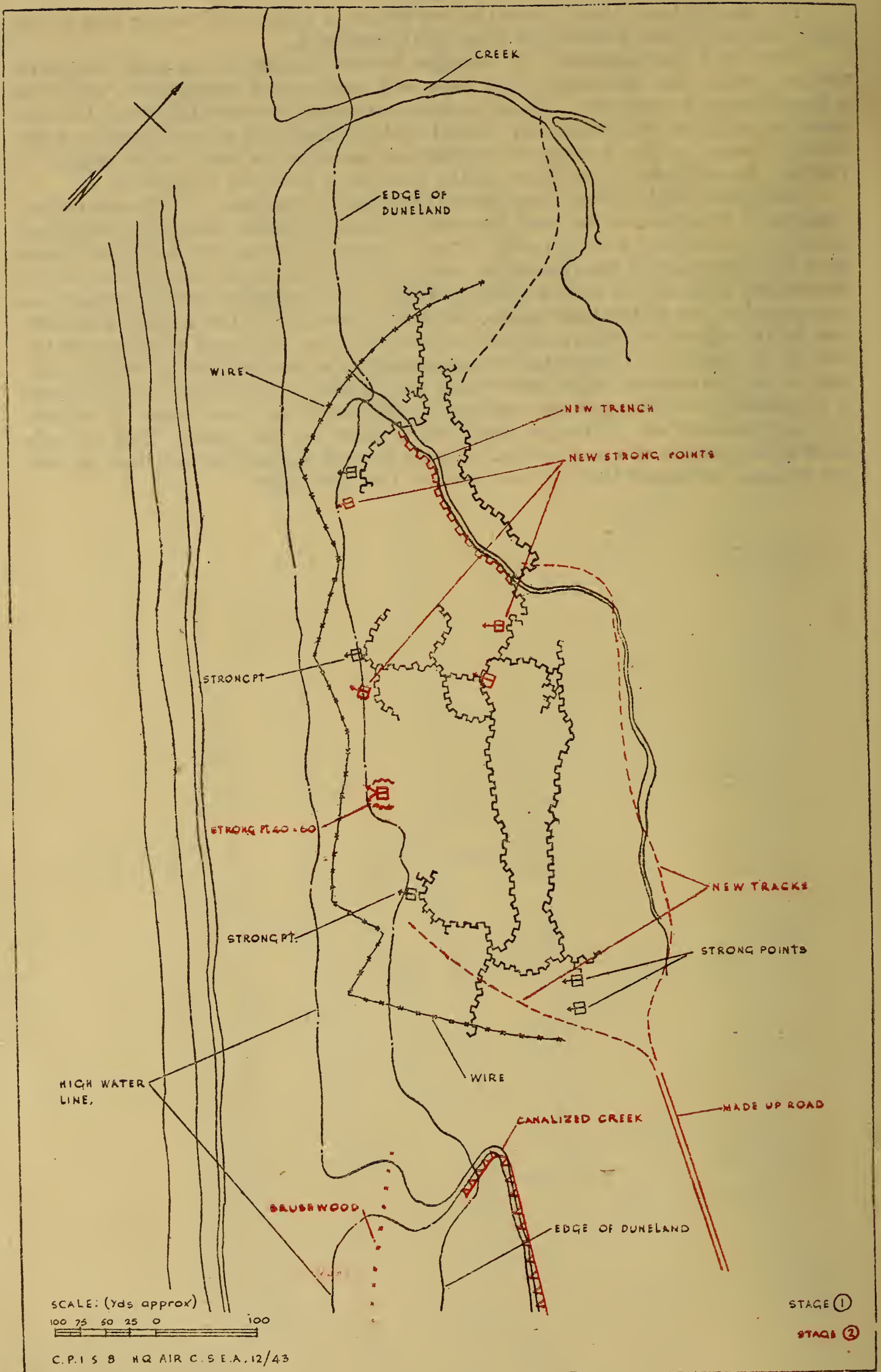
STAGE 2



The locality here given in detail is that shown as Position (C) in the map of the beach defence lay-out given under Chapter II, Section 4.

When first photographed, the defended locality consisted of a fairly extensive trench system with numerous firing bays and one covered strongpoint and with a forward zig-zag line of wire. It can be seen that during the second stage of development the position was extensively altered by the filling-in of a large portion of the trench system, by the adding of two further strongpoints and a short length of trench. In addition, to the North of the position, a road was brought in.

During the final constructional stages the locality underwent even more radical changes, of which one of the most interesting was the addition of an anti-tank ditch formed by canalizing a small creek. For a distance of about 400 yards, its banks have been dug vertical, thus making an anti-tank obstacle about 15 ft. wide, which serves both this and the next adjacent position. A considerable trench system was also added at one of the later stages, which, as annotated in the sketch, is remarkable for the size of the strongpoint incorporated in it as compared with those in the rest of the locality. This particular strongpoint is of the double-bay type in contrast to the more normal single-bay variety (see Chapter V, Section 3). The defences of the position were also strengthened by the addition of another obstacle in the form of a staked-down line of bushes sited well forward on the beach. This obstacle extends for nearly a mile and covers the whole front of the position and links up with the adjacent defended locality described on the next page.



The defended locality illustrated in this diagram [position (B) in the beach defence map] was already at a fairly advanced stage of development when first photographed. Its chief interest lies in the number of strong points eventually incorporated in it—no less than ten in a position with a total frontage of under half a mile. One of these strongpoints, added, as can be seen from the sketch, at a later stage, is noteworthy both for its exceptional size and for the fact that it is set right forward and not apparently connected with the general trench system.

In general, the position seems to be one of particular strength and it is to be noted that, in addition to being covered on one flank by the anti-tank ditch and brushwood obstacle of the adjacent position already described on the previous page, it is also covered on the other flank by a creek.

The position shown in the sketch is that marked as position (A) in the map of the beach defence lay-out. It is noteworthy for its speed of construction, since it reached the first stage shown in something under three weeks. During that time an extensive trench system was completed, two strongpoints were incorporated and a long, forward zig-zag line of wire was erected. About a month later the locality had reached its final stage. By then four new strongpoints had been constructed, a short length of communicating trench dug and the wire defences had been increased and brought round on either flank to link up with the creek on to which the position backs, while a short forward length of brushwood had been staked down in one sector.

In general, this position may be said to be a typical example of the Japanese siting of a position for all round defence.



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STAGE ①

STAGE ②

CHAPTER IV.—SPECIAL POSITIONS.

Section 1.—Introduction.

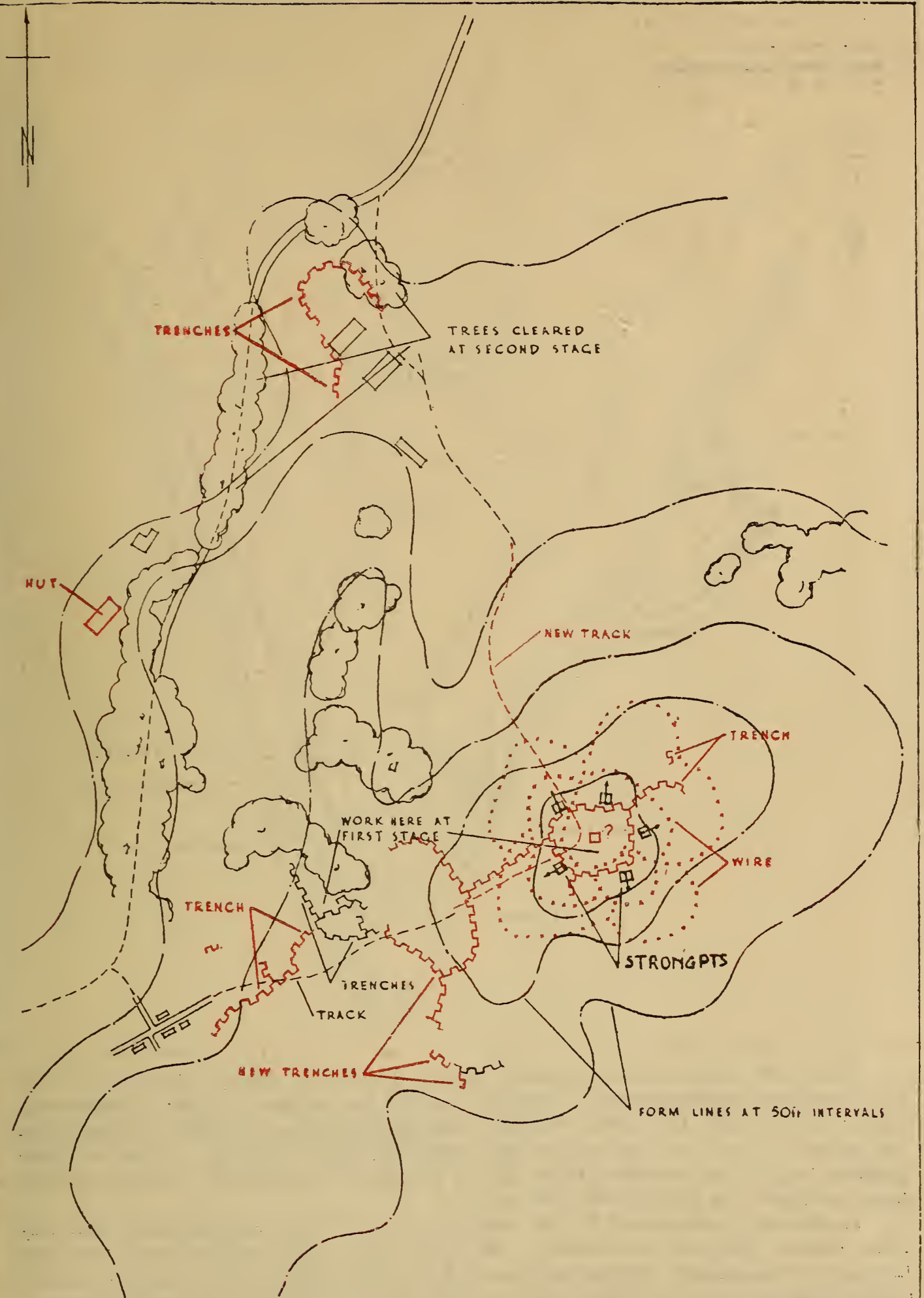
The four positions described in this Chapter have been classified as 'special positions' as the first can hardly be termed typical of Japanese positions, while the other three are noteworthy for the inclusion of heavy calibre artillery pieces within a defended locality, which has not as yet been normal Japanese practice within the S. E. Asia Command. This is, however, an attribute of defence positions which is likely to become increasingly apparent the further the Japanese are forced back on the defensive, and therefore these three positions may give an indication of the pattern to be expected in the future.

Section 2.—A "Multiple Defence" Position.

The Japanese commander who gave the orders detailed in Chapter I made several allusions to the construction of "multiple defence" positions which could continue to put up strong defence even should the general battle situation become unfavourable.

The position shown in the diagram, which is situated at the Southern end of the landing strip shown on the promontory map in Chapter II, Section 2, seems exactly to fit this description. It should be noticed that it has been sited on the crown of a hill with good fields of fire in every direction, which have been further improved by the felling of trees in one area. The sequence of construction of the position is of interest, as it was in the very early stages that the five strongpoints were added and it was only at a later stage that the other ground defences, consisting of trenches and interlaced perimeter wire, were added. This is in contrast to normal Japanese practice, which seems to have been to superimpose strongpoints upon an already dug trench system.

In its final form the locality can be seen to be of great intrinsic strength, and its general lay-out, and in particular the siting of its five strongpoints, is such that it could certainly offer strong all-round defence.



SCALE: (Yds. approx)

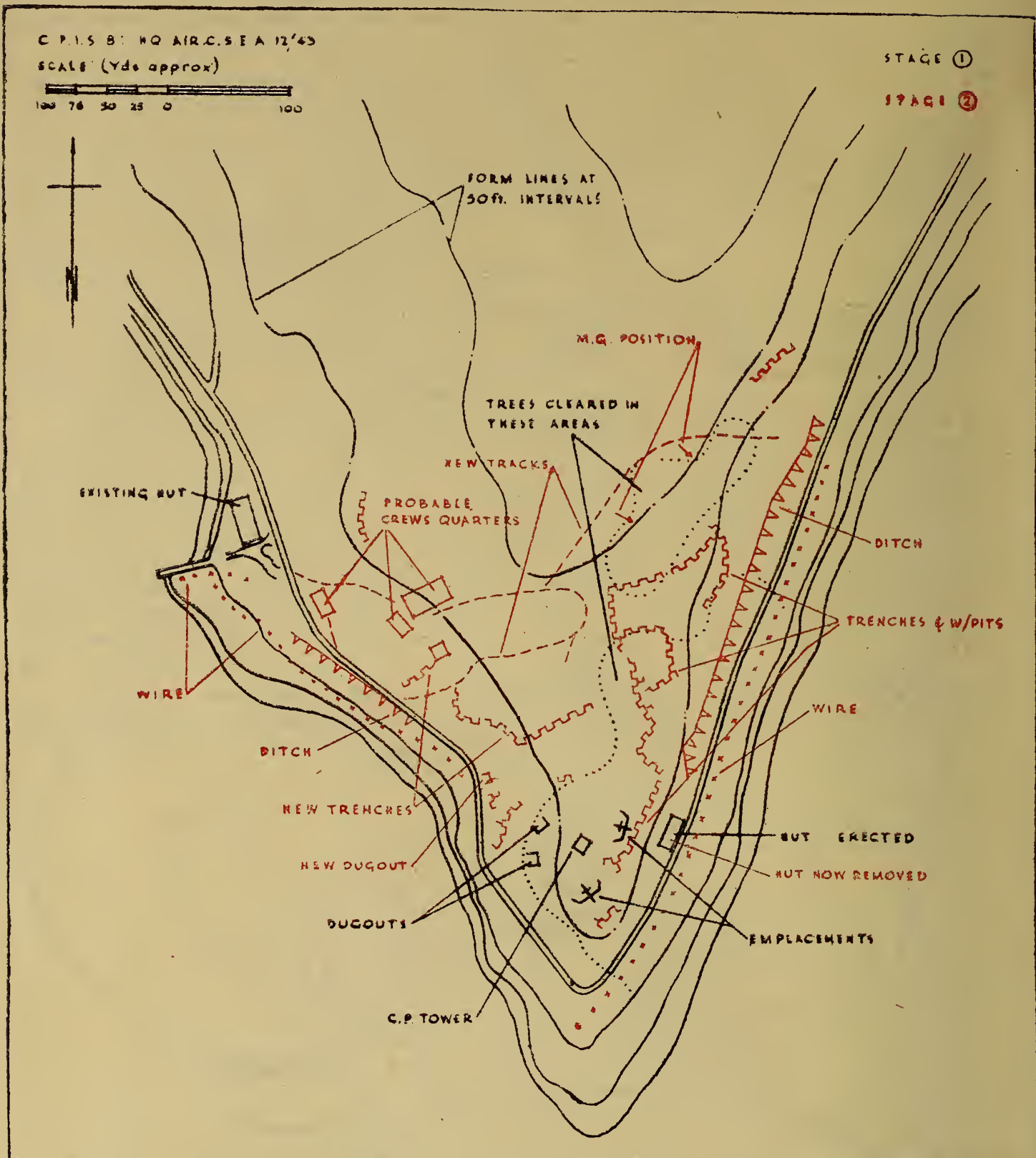
100 75 50 25 0 100

C. P. I. S B: HQ. AIR. C. S. E. A. 12/43

STAGE ① & ②

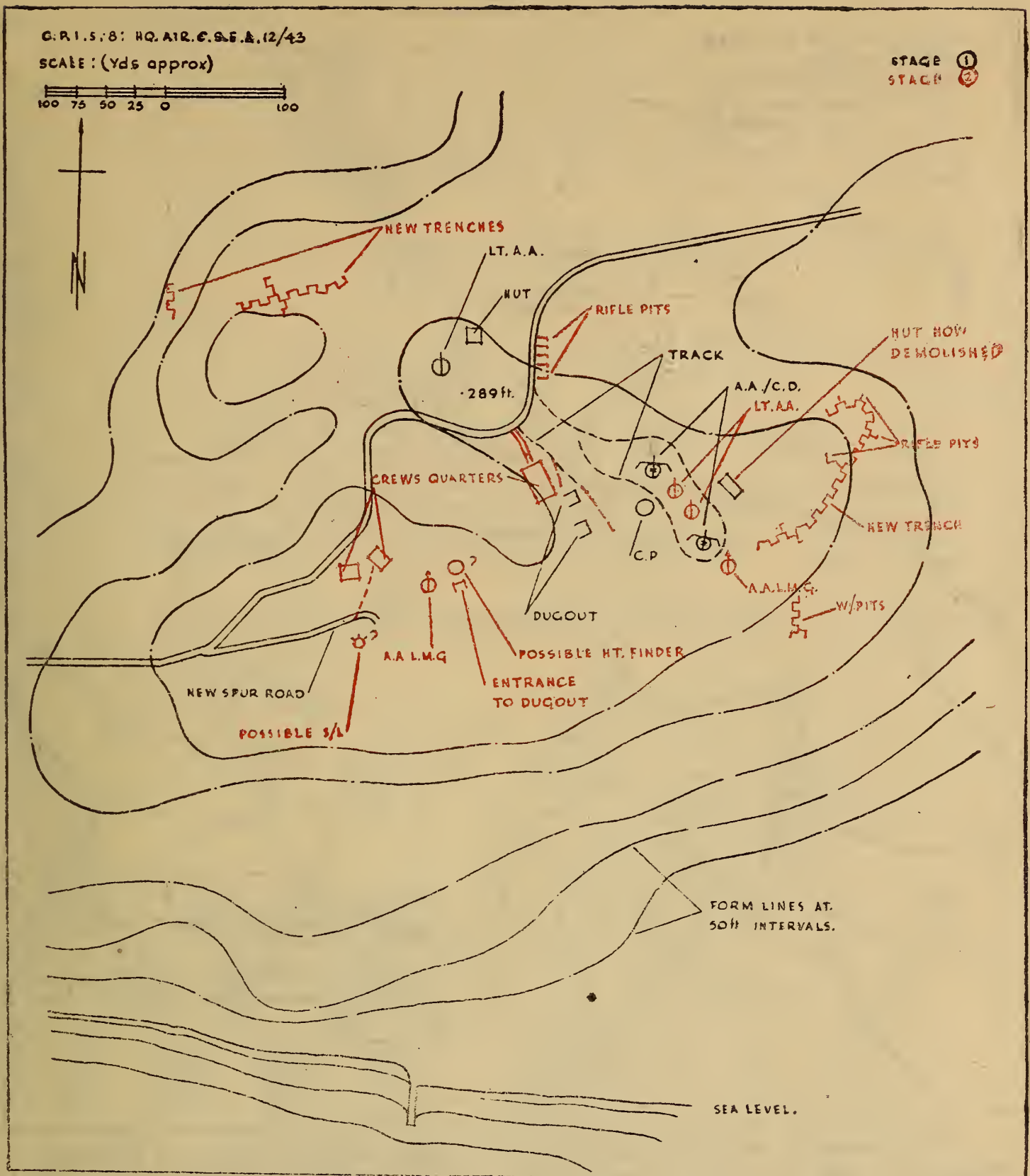
STAGE ③

Section 3.—Coast Defence Positions Employing Heavy Calibre Weapons.

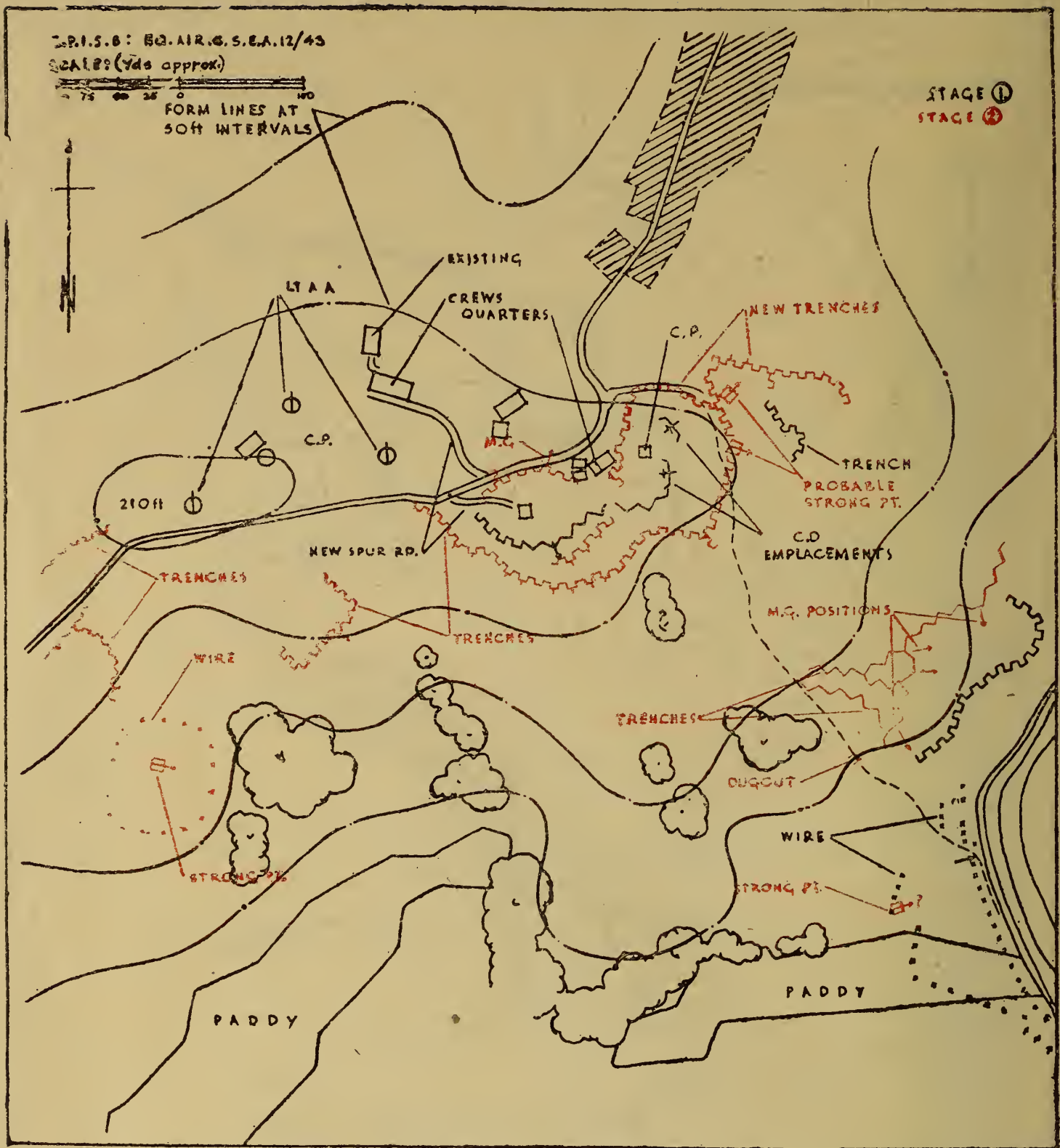


The coast defence position shown in this diagram is chiefly interesting for the two large gun emplacements it contains and for the sequence of its development. As can be seen from the sketch, the first constructional stage was the erection of the two large gun emplacements having an internal diameter of 30 feet. It has not been possible to give an estimate of the calibre of the guns employed, but their shields have been seen to measure 10 feet across.

It was only subsequent to the completion of the two gun positions that any other ground defences were added. However, the process once started has been thoroughly carried out, for the defences now comprise not only an extensive trench system and two M. G. positions, but also two long stretches of wire backed in each case by A. Tk. obstacles. It is likely that the trench system and the obstacles will be still further extended so as to link up at the Southern end of the area, in which case the position would seem to be well calculated to withstand a sea-attack from either flank.



The position shown in the diagram above is of interest in that it appears to be sited with the dual-purpose intention of AA and coast defence. The drawing on the following page shows a C. D. position defended by light AA. It will be seen that in each case the positions have been placed on the highest neighbouring ground and that they are consequently set some way back from the coast line. In the case of the position shown on the following page, subsidiary forward defences have also been added near the shore. On the evidence of aerial photography alone, it is impossible definitely to classify both positions as dual purpose, but this is a common Japanese practice, which was particularly in evidence on Attu Island, and therefore it can reasonably be assumed in the present instance.



It is noticeable that in each case it was the gun positions which were first constructed and that the other defences in the form of trenches and strongpoints were added at a later stage. It was the experience of the U. S. Forces who captured Attu Island that all the Japanese AA guns were so well emplaced as to be secure against anything except a direct hit. The same policy has evidently been followed in these two positions, as the guns occupying the two main positions in the above diagram are set in turrets inside emplacements of 30 ft. diameter, while the two main emplacements in the position shown on the previous page each have walls 15 ft. thick.

CHAPTER V.—OBSTACLES AND STRONGPOINTS.

Section 1.—Introduction.

Japanese defence positions, both inland and coastal, generally include 'strong-points' of one type or another, but the use of artificial obstacles has not by any means been a universal feature. However, air cover in the S. E. Asia Command, of which details have already been given in Chapter III, indicates the fairly widespread use of artificial obstacles for coast defence in this area, and this is a tendency which it can be expected will be intensified the more the Japanese Army is driven back on to the defensive.

The Japanese constructional details quoted in this Chapter have been taken from a training manual issued immediately before the war and therefore can reasonably be expected to represent current Japanese practice.

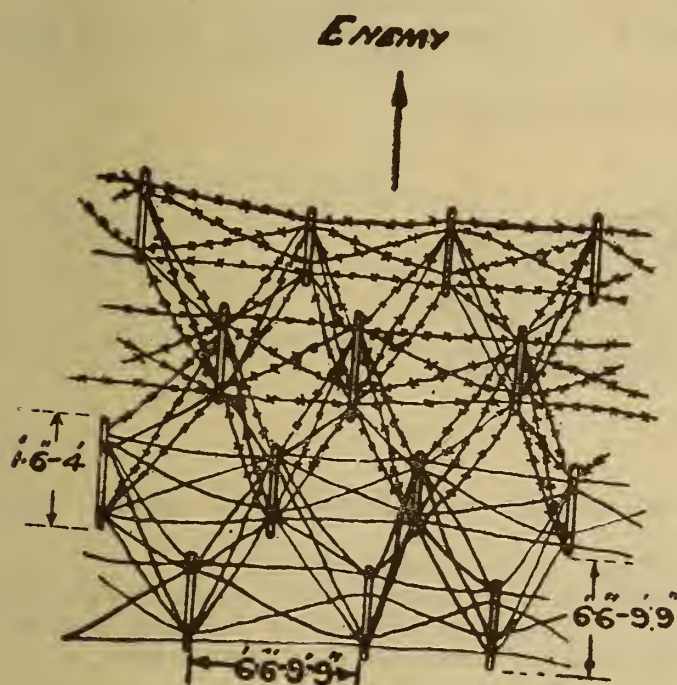
Section 2.—Obstacles.

"The Battalion will continue to improve its positions, and will erect obstacles so as to be prepared for to-morrow's battle", wrote the Commander of a unit on coast defence on a S. W. Pacific island.

According to Japanese teaching, "obstacles are built to obstruct the enemy's advance and, combined with fire-power, to destroy or hinder his movements, or to prevent surprise attack". They further state that, normally, wire entanglements and movable obstacles combined with mines, abattis and snares are used. For anti-tank defence, ditches, mines and obstacles for separating the infantry from their accompanying tanks are employed. The following details of their methods are given:

(a) *Wire Entanglements*.—"These are divided into two main types, net and double apron. Both are difficult to conceal, but their effectiveness is good when combined with fire-power".

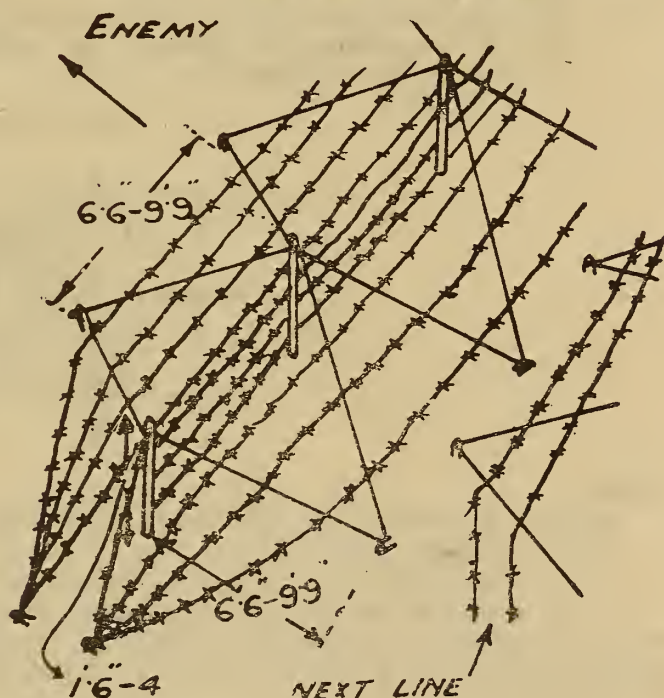
Net Wire Entanglement



Notes.

- (1) "This sketch is an example of the mixed use of barbed and smooth wire.
- (2) "The height of the posts and their spacing must be irregular.
- (3) "The wires must be tight with the exception of the lower horizontal line.
- (4) "To increase the efficiency of the obstacle, make the net form denser by stretching thin wires between the main wires, or by adding supplementary wires."

Double Apron Wire Entanglement



Note.

- (1) "Sometimes a wider space is left between the two lines of entanglements."

Despite the above instructions, it has been common practice in coast defence positions to utilise wire fences with single strands, although double apron entanglements have been definitely identified in inland defence layouts.

(b) *Movable Obstacles*.—"Movable obstacles have small obstructing power, but since they can hinder the enemy's movement through being simple to transport and conceal they are used when an obstacle is needed to surprise the enemy or when concealment of positions is necessary. They may also be used to close up passages in an obstacle or when it is difficult to drive posts into rocky or frozen ground".

As shown below, three types are used—barbed, knife-rest and spiral (concertina).

(i) *Barbed Type*.



Plan View.

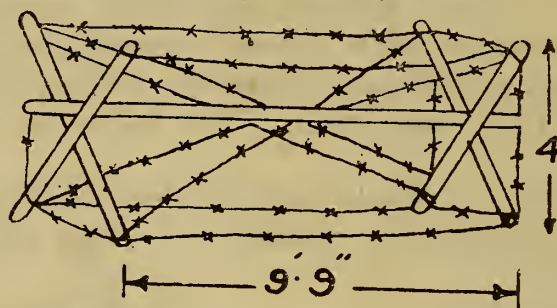


Obstacle in Position.

Note.

- (1) "When transporting, wind up from one end."

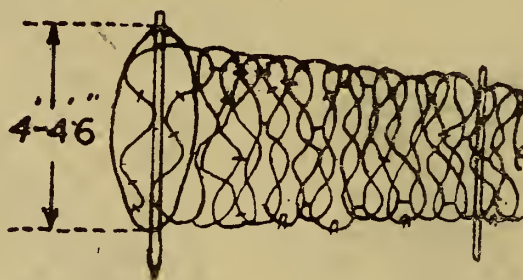
(ii) *Knife-rest Type*.



Notes.

- (1) "In order to make it easy to transport, the obstacle should be built to fold up."
 (2) "When setting the obstacle up, attach it to already established obstacles and secure it with posts."

(iii) *Spiral Type (Concertina)*.



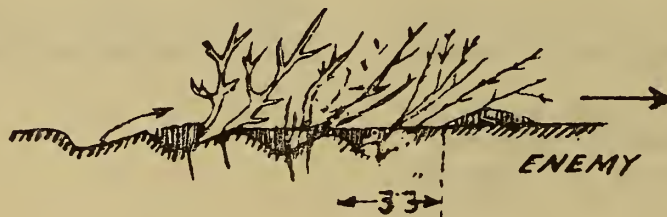
Notes.

- (1) "In setting up, hold on to both ends and stretch out; fasten with stakes, wire staples, etc."

- (2) "In folding up, compress from both ends and tie in several places."

It is of interest that the Japanese presumably do not carry ready made concertina wire, since the document from which the above has been taken also gives detailed instructions on the making of concertina type wire by binding it round a wooden framework.

(c) *Other Obstacles*. (i) *Abattis*.



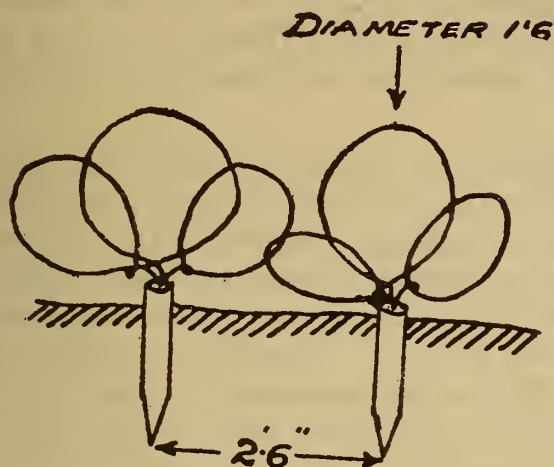
Notes.

- (1) "Use trunks and branches of heavily branched trees. Cut away the narrow branches, sharpen the slightly larger ones and point the tips towards the enemy. Set them in so that a back line of branches covers the branches just in front."
 (2) "If tied with wire at the places where branches cross each other, or if wire is stretched at irregular intervals among the branches, the effectiveness of the obstacle will be increased."
 (3) "Abattis are sometimes constructed by cutting down trees about $1\frac{1}{2}$ —3 feet from their roots, and pointing them in the direction of the enemy."

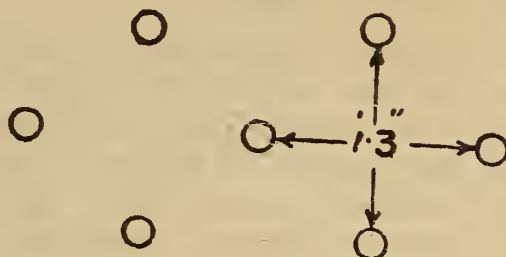
In connection with note 3, it is interesting to find a Japanese Commander of a coastal defence unit instructing his troops to "fell the coconut trees and use them as obstacles".

(ii) *Snares*.—These may be of three types, which are illustrated in the sketches. It appears that either plain or barbed wire may be used, the latter being the most effective.

Ring Type.

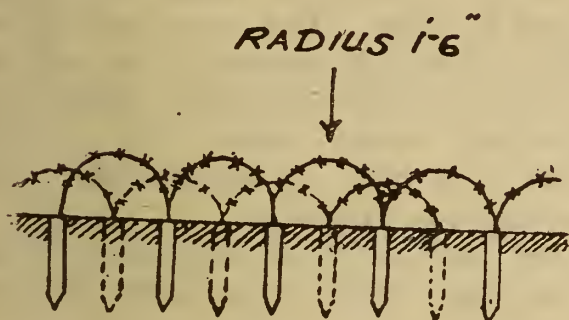


Ring snares.

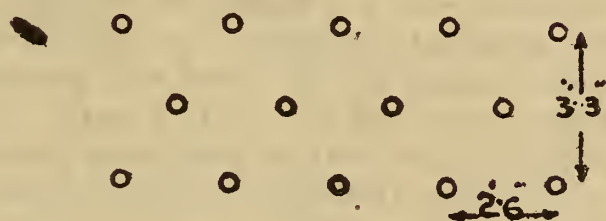


Pattern of lay-out.

Half-moon Type.

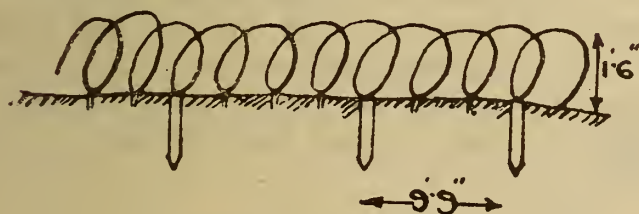


Half-moon snares.



Pattern of lay-out.

Tangled wire Type.



Tangled wire snares.



Pattern of lay-out.

It is evident that these snares are laid in 'fields' on the principle of a mine field. In coast defence, they might very effectively be employed below the high water level, where they might well be expected to take troops wading ashore by surprise.

(d) *Anti-tank Obstacles*. (i) *Ditches*.—"Construct a tank ditch about 1½ metres (4 ft. 10 ins.) deep in the vicinity of the beach positions against amphibious tanks" wrote the Japanese commander of a battalion engaged on coast defence in the South West Pacific Area. He was not, however, strictly following the official training instructions which are given below:—

"Ditches, when combined with fire power and close-quarters assault, make an effective obstacle. However, they not only have the disadvantages of being hard to conceal, easily destroyed and bridged, but also entail a great amount of labour in building.

"The size of the ditch will vary according to the tank, but to check the movement of medium tanks the width at the top must be at least 3 metres (9 ft. 9 ins.) and the depth at least 2 metres (6 ft. 6 ins.). To slow down the tank the depth need be only 1 metre (3 ft. 3 ins.) but the width at the top must not be less than 3 metres (9 ft. 9 ins.). Always make the slope as steep as possible."

The prolific extent to which the Japanese are prepared to employ these anti-tank ditches is shown by one beach defence position in Burma, where an anti-tank

ditch has been dug for an almost unbroken stretch of four miles covering the fronts of a series of defended localities.

(ii) *Mines*.—"Tank land-mines are simple to handle and can quickly be set in the desired position, but since they may often be prematurely destroyed by gun fire or bombs or cleared away, it is most important to conceal their location from the enemy.

"The spacing of mines laid in a mine-field differs according to their purpose, type and the terrain. Usually they are laid in a fish-scale pattern at an interval of about three paces and buried at a depth to conceal them. Sometimes, depending on the situation, observation land mines are set out". These are mines whose disposition is under observation and their detonation can be caused by the observer according to the situation.

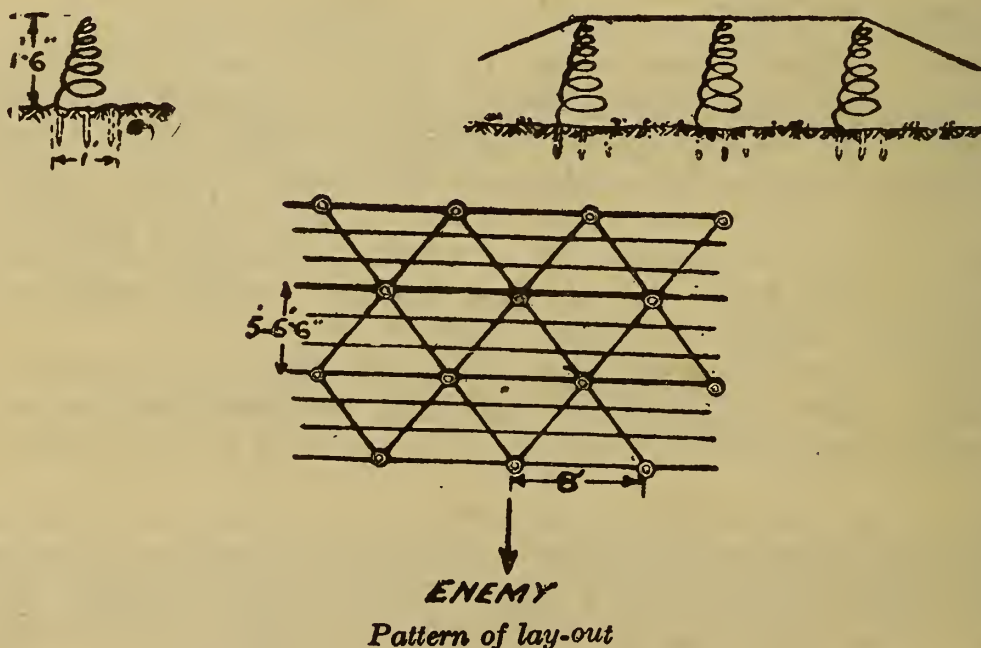
Up to now the Japanese have made sparing use of mines in their defence positions, but, as has already been suggested, the widespread use of anti-tank obstacles in certain coast defence positions in the S. E. Asia Command probably betokens the increased employment of mines. A possible indication of this has been noticed in one beach defence lay-out where, set forward of an anti-tank ditch covering the fronts of several defended localities, has been erected a bamboo fence running approximately along the high-water line. This is an extremely flimsy structure which would appear in no way to constitute an obstacle in itself and it may well be that it has been put up by the Japanese to mark, for their own troops, the edge of an anti-tank mine-field.

Numerous anti-tank mines, laid in shallow water, were included in Japanese defences at Wandokai on the Huon Peninsula in New Guinea in December, 1943.

In the Gilbert Islands the Japanese used a 105 lb. mine. This contained 45 lbs. of explosive and was detonated either by contact with two horns at the top or by wires attached to them. In this area they were used chiefly below water level and were found 50 yds. from, and parallel to, the high water mark. On a coral reef they were laid 10—15 feet apart. They have been used in conjunction with A. Tk. obstacles, but no particular pattern of laying was apparent.

(iii) *Other Obstacles*.—Various other anti-tank obstacles are suggested which include 'dragons teeth', made either of wood or stone, felled trees, pits and wire entanglements.

(e) *Obstacles for Separating Tanks from Infantry*.—"When large anti-tank defences cannot be constructed, the attack can be frustrated by erecting obstacles to separate infantry from tanks. These are simple to construct and conceal, but must always be so sited that effective fire power can be brought down on them. Two main types are employed—ring snares [Paragraph (c) (ii)] and spiral type entanglements (below). Both these obstacles will allow the tank to pass, but will hold up the infantry."



Note.

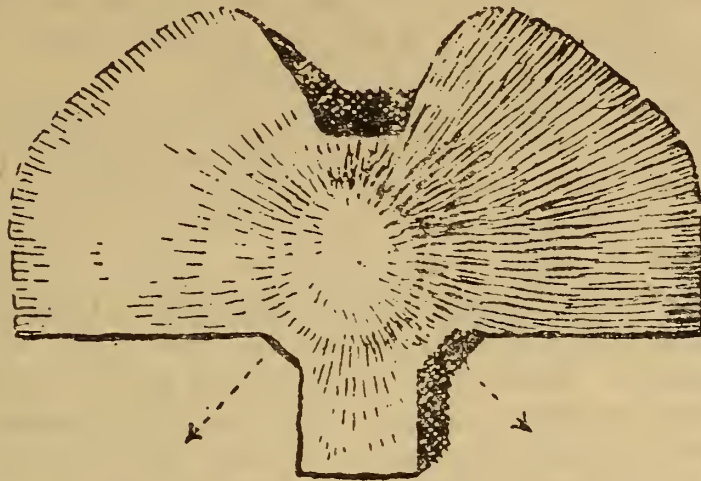
- (1) 'As the tank passes over, the spiral supports are depressed, but after it has passed they return to their former position by means of their spring force.'

Section 3.—Strongpoints.

The two types of strongpoints most commonly identified in coast defence positions in the S. E. Asia Command are shown in the diagram.

THE DOUBLE BAY STRONGPOINT

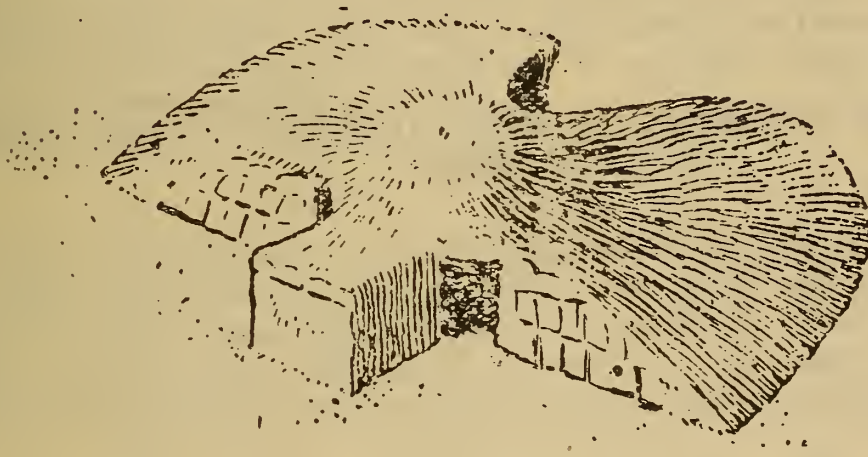
Plan



Front Elevation.

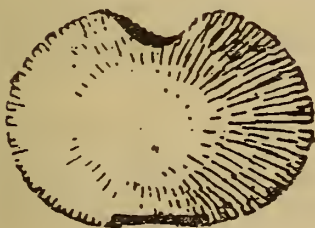


Oblique View.



THE SINGLE BAY STRONGPOINT.

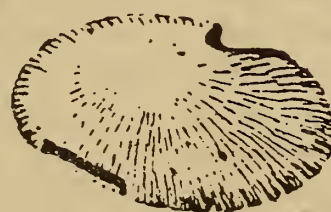
Plan.



Front Elevation.



Oblique View



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The details of these strongpoints are as follows :—

(a) The Double Bay Strongpoint—These are built in two sizes, 25 ft. by 15 ft. and 60 ft. by 40 ft. They consist of mounds of earth from 5 ft. to 12

ft. in height, with a rear entrance well recessed into the mound. Forward, a central, apparently solid block projects to form two bays. These bays vary in size.

- (b) The Single Bay Strongpoint—This consists of a roughly circular mound of earth about 25 ft. in diameter and 5 ft. high, with entrance at the rear opening on to a crawl trench or the main trench system. In front is a firing-slit on, or slightly above ground level, from 6 to 8 ft. long and about 1 ft. 6 in. to 2 ft. high.

These strongpoints are designed for use by any of the weapons of the Japanese Infantry Regiment, but are probably best adapted for use by 37 mm anti-tank guns or MMGs. On the other hand, the open sided strongpoint shown in the Frontispiece of this pamphlet is probably designed to take a weapon of larger calibre, such as a 75 mm field piece. This strongpoint is in any case rather an exception, as it appears to be more in the nature of a roofed-over gun position. Other strongpoints of the more normal single and double bay types can be seen in the series of photographs given on the frontispiece. Their low construction and unobtrusive appearance even in completely open country should particularly be noticed.

The Japanese give the following details of their construction: "Coverings for positions are divided according to the degree of strength of support provided. Light coverings, up to 8 ft thick, can withstand a direct hit from a field gun; medium coverings, 20 ft. thick, can withstand a direct hit from guns of 6 ins. calibre; heavy coverings, 32 ft. thick, are capable of withstanding a direct hit from guns up to 11 ins. calibre". In building these positions the Japanese advise the use of "stones, timbers, iron, etc., set close together and covered with layers of earth".

The Japanese use of these strongpoint positions has often been characterised by good camouflage, a feature which has been especially noticeable in the S. W. Pacific, while in Burma attempts have been made to disguise them by the use of bushes. These strongpoints are normally sited with inter-related fields of fire, and consequently if only one position in a locality is captured it may be rendered untenable by cross fire from the remaining positions, the accuracy of which suggests that previous registration of range has been carried out. Chapter III of this pamphlet gives various examples of the use of strongpoints within a defended locality.

CHAPTER VI.—AN EXAMPLE OF SOME JAPANESE COAST DEFENCES IN BURMA.

Section 1.—General.

1. From a recent study of Japanese tactical practice in coast defence the conclusion was reached that if there was high ground behind the beaches the main Japanese strength would be there, but that if there was no commanding ground behind the beaches the main localities would be sited well forward. The position sketched in this chapter (Diagram 3) is an interesting example of the latter alternative.

2. Except where otherwise stated the area depicted in the sketch is covered with paddy fields.

3. The foremost defended localities consist of a series of positions about 400 yards apart, each occupying a frontage of 150 or 200 yards. Each locality is completely encircled by an anti-tank ditch. Between localities is a continuous anti-tank ditch behind which a communication trench has been dug.

4. Three to five hundred yards back from the F. D. Ls. is a second zone of defences being dug in a line of thin scrub. At present this is hardly more than a single trench with a few bays extending forward and to the rear, but the whole position is continually being improved and further development of this second defensive strip or zone may therefore be contemplated.

5. Finally, there is a third zone of defences 1,000 to 1,500 yards behind the F. D. Ls. Here maximum use is being made of the cover afforded by a wooded area, and this third zone may contain more defences than those shown on the sketch. It will be noticed from the sketch that as a general rule no locality is more than 400 yards from the localities on its flanks or from other positions in rear.

6. A recently captured Japanese directive on coastal defence laid down that each company and platoon would occupy independent positions. Whilst no attempt

will be made here to assess the garrison of the coastal area drawn below, it is of interest to note that not only is each forward locality a completely independent strong point, apparently provided both with artillery and medium machine guns, but also that anti-tank ditches running inland divide the coastal strip into sectors each containing two or more foremost defended localities.

Section 2.—Foremost defended localities.

7. Diagram 1 gives a foremost defended locality in some detail. Although not the largest F. D. L. in this area it commands an inlet and, perhaps for this reason, contains two roofed-in posts big enough to take artillery; also the bridge across the anti-tank ditch in rear of the position is broad enough for wheeled traffic. Whilst other localities had trip-wire in front of them, this F. D. L. has nothing in front of the anti-tank ditch.

The ditch is about 6 feet deep. In some cases poles are fixed in various positions across the bottom of the trench in order to support the revetment.

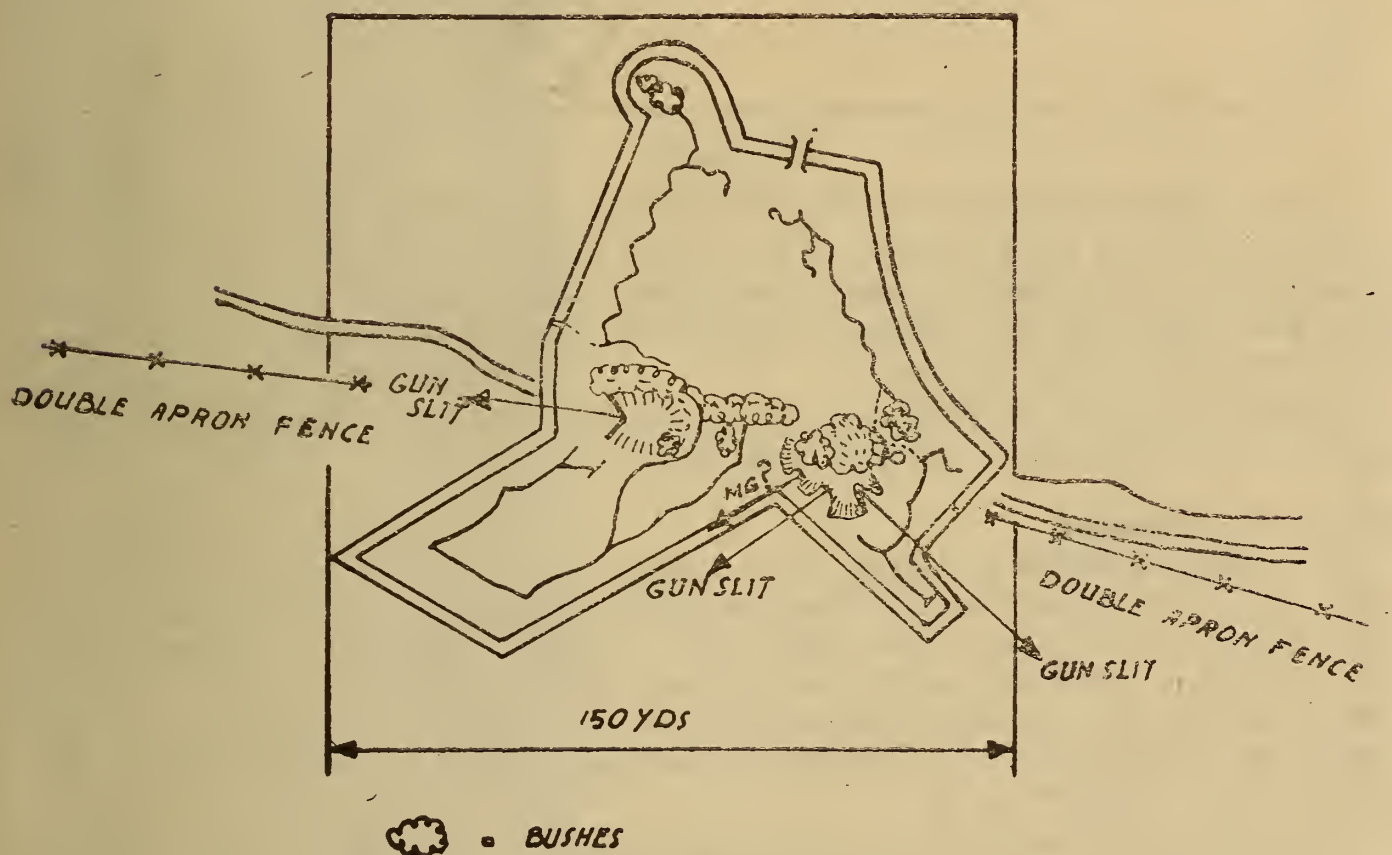


Diagram 1.

8. Below is another sketch showing the forward edge of an individual locality :—

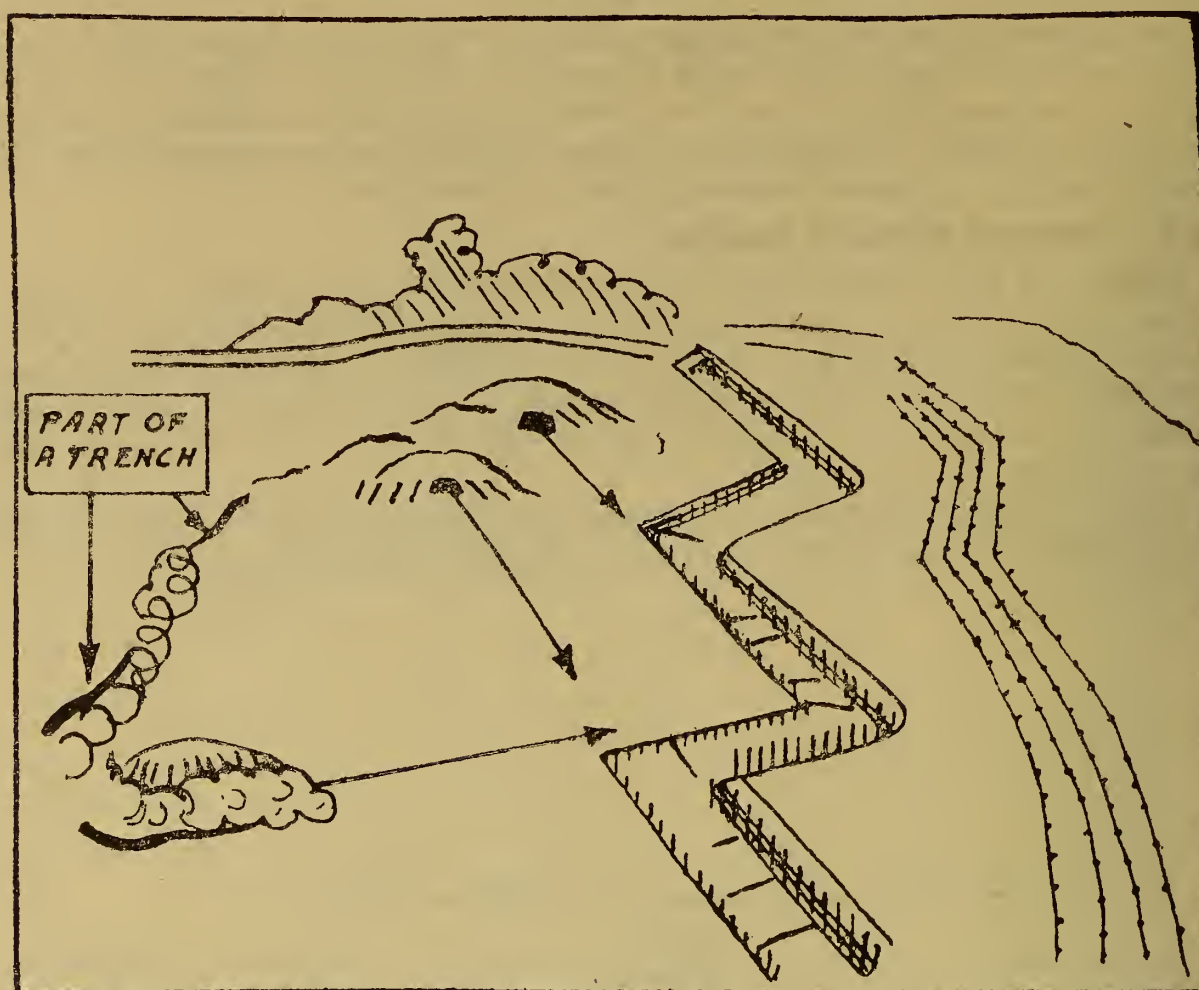


Diagram 2.

Wire consists of four rows of trip wire, with 5 or 6 feet between each row.

The Anti-Tank Ditch is about 12 feet across from revetment to revetment, and about 16 feet across from top edge to top edge. The revetment is at present only about 3 feet high, but the uprights are double this height and there are indications that revetting is being continued.

Earth and Timber M. G. Posts.—Three covered posts were identified and their line of fire is indicated on the sketch by arrows.

Section 3.—Obstacles.

9. *Anti-tank ditches* are about 16 feet across at the broadest part and about 6 feet deep. Throughout most of their length they are covered by a communication trench which is likely to be of considerable value to tank hunting detachments. The fire slits of earth and timber posts are so sited that guns and M. Gs. will fire straight down the anti-tank ditch and in front of it. An interesting feature is the narrowness of the field of fire—the strip of flattened ground in front of each fire slit is only about 15 degrees wide.

10. *Wire.*—In this position only one double apron fence is used along the front but this should not be regarded as an invariable rule as more wire has been used in other positions. The chief point of interest here is that immediately in front of a locality there is no fence, the apparent object being to attract the attackers to the point where the greatest concentration of fire can be brought to bear upon them.

11. *Mines.*—So far there has been nothing to indicate the presence of mines either on the beaches or further back, but it should not be forgotten that mined Japanese beaches have already been encountered and that if not already mined this position may be mined later.

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FEW POSNS SHOWING
ON EDGE OF TREES
AND BUSHES.

THINLY WOODED AREA WITH VILLAGES

POSNS ON
EDGE OF
WOODED AREA

A TK OITCH
JOINS NATURAL
OBSTACLE.

LOCALITY
IN SCRUB.

DIGGING IN PROGRESS.
ISOLATED FOX HOLES
NEAR & UNDER BUSHES.

THREE POSTS WHICH MAY CONTAIN GUNS OR M.Gs.
THE GROUND IN FRONT OF EACH POST HAS BEEN
FLATTENED OUT TO ALLOW A FIELD OF FIRE OF 15
DEGREES.

MG & GUN
BOTH FIRING DOWN
OBSTACLE

DIGGING IN PROGRESS.
ISOLATED FOX HOLES
NEAR & UNDER BUSHES.

THREE POSTS WHICH MAY CONTAIN GUNS OR M.Gs.
THE GROUND IN FRONT OF EACH POST HAS BEEN
FLATTENED OUT TO ALLOW A FIELD OF FIRE OF 15
DEGREES.

MG & GUN
BOTH FIRING DOWN
OBSTACLE

DIAGRAM 3

CHAPTER VII.—JAPANESE TACTICS IN COAST DEFENCE.

Section 1.—Major Tactics.

1. The general tactics of the Japanese in the conduct of the defensive battle have already been described in Chapter III of "Japanese in Battle". Tactics of coastal defence will not vary greatly from these as regards the construction of and fighting from individual positions but it is of interest to speculate on how the Japanese meet the problem of shortage of men which must be inherent in all forms of coastal defence, particularly that of islands.

2. To meet this problem there are two possible courses—to retain a large reserve and defeat the attack after a landing has been made, or alternatively, to retain practically no reserve and attempt to stop a landing. The contents of this book and experience to date indicate that the Japanese are likely to adopt the second alternative. In doing this they may be swayed to some extent by their trust in every man to fight to the last.

3. The adoption of this method of defence has several obvious implications.

(a) From the aspect of what might be called major tactics, the defence will be inelastic and the Japanese will be unable to meet the unexpected either in the nature or direction of attack.

(b) Strong immediate counter attacks are to be expected but deliberate counter attacks will be the exception and attacks, once a bridgehead is established, will, failing a counter-offensive, tend to be put in piecemeal as troops are made available from other sectors of the defence.

Section 2.—Location of Defences.

The tentative pattern and principles of coast defence which seem to emerge from the preceding Chapters are that the Japanese may either set their positions back from the coast line on high ground with the intention of gaining complete control of ground and covering the beaches by fire alone, or if neighbouring high ground is not available, then their positions will be sited right at the water's edge with the intention of engaging any landing troops in direct combat at the moment most difficult for them. The selected localities will be well laid out and positions carefully constructed, while they will include a number of strongpoints with interrelated fields of fire. In comparison with inland defence positions, greater use is likely to be made of both anti-personnel and anti AFV obstacles, which may be of a variety of different types. Any artillery in the position will be boldly employed and sited, while its use in a multi-purpose role is definitely to be anticipated.

It is possible that the comparative inexperience of the Japanese in anti-tank defence may be an important factor and we know of at least one case where tanks landed in the S. W. Pacific without damage though numerous anti-tank mines had been laid in shallow waters.

A further point about the actual construction of defences is that the Japanese will tend to construct more defences than they can man thus giving an impression of greater strength and also alternative positions if these are required.

Section 3.—Morale.

The Japanese conception of defence is essentially offensive. Consequently though their defence may be inelastic from the aspect of major tactics it will never be a passive process, but within the company and on occasions the battalion area will be extremely active. Local immediate counter-attacks will be the rule. Their object will always be the annihilation of the enemy landing forces. As an instance, the Japanese commander of a small force stationed on coast defence duties in New Guinea exhorted his troops, before the expected Allied attack, to "frustrate the enemy's landing plans with a counter attack like an electric shock, and at the proper moment to annihilate the enemy by close range fire, by throwing hand grenades and in hand-to-hand combat."

The natural corollary of this offensive attitude is the determination not to surrender, but to fight on to the last man and the last round. Two examples, both of this characteristic and of the offensive spirit, were given by the Japanese defenders

of Makin and Attu Islands. In the former case, the island was overrun by American marines in a raid in 1942 and the small Japanese garrison apparently annihilated. However, approximately a dozen of the Japanese escaped the mopping up process, but not content with escaping with their lives, they formed themselves into a section and attacked the American forces as they were preparing to leave on completion of their mission. On Attu Island, the defenders were, after stubborn fighting, ejected from their prepared positions and those that remained of them were driven back and cornered in an evidently hopeless position. However, sooner than surrender, all of them, fit and wounded alike, joined together in a final desperate charge which was only brought to a stop as the last of them was killed. These points are also well illustrated by the captured operation order given in Chapter I, and the special tenacity of the Japanese in defence must always be reckoned with when calculating the resistance to be expected from a coast defence position.

